Clinical Lectures ON BRONCHIECTASIS.

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LECTURE II.

GENTLEMEN,—I invite your attention to-day to another case of bronchiectasis which has recently been in our wards. It differed from both those cases which formed the subject of my last lecture, inasmuch as it was much less severe than either of them, and the patient improved so much whilst under our care as to be discharged in a fair state of health.

A young labourer named D——, nineteen years of age, was admitted into Founder ward, under my care, on Jan. 12th, 1876. He stated that he had suffered from small-pox when a youth, and also from measles, whooping-cough, and scarlet fever in boyhood, but had in other respects enjoyed good health until the previous autumn, when he had an attack of bronchitis, and was an inmate of this hospital under the care of my colleague, Dr. Thompson, for several weeks. He was discharged well on Dec. 18th, but a fortnight afterwards was seized, whilst walking in the street, with such severe pain in the left side as compelled him to return home. He sought aid here again on the following day, and continued to attend as an out-patient for some days, until, being unable, by reason of increasing illness, to walk to and from the hospital any longer, he was received into the wards. During the fortnight previous to his admission his expectoration had been occasionally streaked with blood, and he had, on one occasion, had a more definite attack of hæmoptysis.

On admission he was by no means an ill-nourished young man, and had not much dyspnœa. He still complained of pain in the left axillary region and of cough, which occurred in paroxysms, and was attended by an abundant expectoration. Pulse 108; temperature 98·4°; respiration 23. The resonance on percussion below the clavicles, and also in the supra-spinous fossæ, was slightly impaired, more especially on the right side. The breath-sounds were everywhere harsh, and the sound of expiration was very distinct. Loud creaking rhonchus was heard all over the front of the right, and sibilus over the front of the left lung. The vocal resonance was bronchophonic below both clavicles, and also in the base of the right lung. Large crepitation was heard in the right mammary region, and in the posterior base of the right lung; smaller and less persistent crepitation in the base of the left lung. Pleuritic friction was detected in the left axillary region, corresponding with the situation of the severe pain which had ushered in the present illness. Heart-sounds normal; urine normal. The expectoration was very abundant, and had a putrid, offensive smell; it consisted of a somewhat frothy, yellow-coloured, muco-purulent fluid, containing many nummular masses.

It is unnecessary for my present purpose to relate the minute variations in the patient's condition as detailed from day to day in the case-book. I therefore turn to the date of Jan. 30th, and find it recorded that the breathing was cavernous in the base of the right lung, and that bronchophony and large crepitation were still audible. Down to this time the pulse had ranged from 78 to 96, and the temperature, taken morning and evening, had usually been about 98·4°; having only on one occasion reached 99°, whilst it had twice fallen as low as 97·4°. This, as you are well aware, is in accordance with the usual course of the temperature in chronic bronchitis; in which, when uncomplicated with acute disease or tuberculosis, the temperature is commonly rather below than above the normal standard. On Jan. 31st, the patient complained of having slept badly, and of his cough having been very troublesome, and the expectoration unusually copious. He also said, for the first time, that he perceived a bad smell when he coughed, and that the sputum had a nauseous putrid taste. The pulse this day rose to 126, the respiration to 36, and the temperature to 102·5°. This acute attack lasted three days, and then gradually subsided. On the evening of Feb. 3rd, the temperature had fallen to 98°, and the pulse to 84. Next day the pulse came down to 72, and the temperature to 97·2°, and on auscultation, whilst the cavernous breathing and bronchophony were still distinct over the base of the right lung, no moist sounds were audible. No obvious external cause could be traced for this febrile attack, and I concluded at the time that the decomposing sputum, accumulated in the dilated tubes, had excited irritation in the adjoining alveolar tissue. The increased fetor and copiousness of the sputum coughed up during the attack, the disappearance of the abundant crepitation heard in the dilated tubes the day before the attack, together with the rapid subsidence of the febrile symptoms after the sputum was raised, are all points which, I think, afford strong corroborative support to this view of the case. From this time the patient improved rapidly, and was discharged on Feb. 23rd.

During his stay in the hospital he never suffered from dyspnœa, was always able to lie down, and complained chiefly of cough; but, though free from dyspnœa, in the strict sense of the word, he was short of breath on exertion. The pulse varied somewhat from day to day, ranging from 78 to 90. The temperature never again exceeded 98·4°, and the respiration varied from 20 to 24. The character of the breath-sounds continued the same throughout—namely, harsh over the lungs generally, and tubular or cavernous in the posterior bases of the lungs and below the right mamma. Sometimes, when large crepitation was present, the cavernous breathing was less obvious. The amount of crepitation varied much from day to day, but upon the whole gradually decreased during the last three weeks that the patient was under observation. The sputum retained the same general characters, but latterly became much less copious, less offensive, and more tenacious.

The treatment was directed mainly to relieving the bronchitis, and improving the patient's general health. He was made to inhale, several times daily, the steam of boiling water impregnated with oil of turpentine, and took a vegetable bitter, with ten minims of diluted nitro-hydrochloric acid, three times in the day. At first, when his cough was still troublesome, especially at night, he took at bedtime a pill containing five grains of compound hemlock pill, and a quarter of a grain of hydrochlorate of morphia, and occasionally during the day time a linctus containing syrup of squills, hydrocyanic acid, and a minute dose of morphia. He was in good condition and comparatively comfortable when he left the hospital.

When I say that this patient improved greatly under treatment, I do not mean to imply that the dilated bronchial tubes have resumed, or indeed ever can resume, their normal condition. The bronchitis which is so frequently present in bronchiectasis had subsided, and he left us quite able to resume his work, and may, under favourable circumstances, live and continue his employment for many years; though he will unquestionably retain his malady, and will always be liable to suffer from recurrences of bronchitis. Each recurrence will tend to aggravate the bronchiectasis, until he may probably be cut off by a more than usually severe attack of catarrh; or else, towards middle life, the secondary consequences of respiratory obstruction will probably ensue, and lead to a fatal issue.

In my comments on the case of P——,[1] I remarked upon the similarity of the physical signs of bronchiectasis and those of phthisis, and the difficulty that this sometimes causes in forming an accurate diagnosis. This difficulty is, of course, much enhanced when, as sometimes happens, bronchiectasis is complicated with phthisis—a complication which existed in a patient recently discharged from under my care in Founder ward. The case, I may observe, was not one of phthisis in which bronchiectasis had occurred as a complication, but was substantially one of bronchiectasis, the phthisis being inconsiderable in extent and perfectly quiescent.

The patient, a married man, named Joseph S——, aged thirty-five years, a brewer's labourer by occupation, was admitted on May 2nd, 1876. Although employed in a brewery he had always been a temperate man, and had latterly altogether abstained from drinking. His family history was most satisfactory, his parents and six brothers and sisters being all alive and in good health. Until seven years ago his own health had also been uninterruptedly good. He had then had an attack of pneumonia on the left side, since

[1] THE LANCET, Nov. 24th, 1877, p. 753.

which time he had suffered more or less from cough, which was always aggravated in winter. Three winters ago he spat up considerable quantities of blood for the space of three weeks. Since last Christmas his cough had been more troublesome than before, and he had expectorated very copiously. The paroxysms of cough often ended with vomiting, more especially in the early morning on first awaking from sleep. He suffered much from cold feet and occasional chilliness, and perspired freely at night. He had lost much flesh, his weight being now, he stated, less by two stone than it had previously been.

On admission, notwithstanding his alleged loss of weight, he appeared but little emaciated. His pulse was 78; temperature 98·6°. The breathing was almost entirely abdominal, there being scarcely any expansion and but little elevation of the chest-walls, even during full inspiration. This deficiency of thoracic movement was seen, on forcible breathing, to be most apparent on the left side. The resonance on percussion was generally fair over the whole of the chest both before and behind, though perhaps the note was a little less clear below the right clavicle. On auscultation, loud snoring rhonchus was heard generally over the front and upper part of the back of both lungs. The breath-sounds were everywhere harsh, and the expiration prolonged and very audible. Rather large crepitation, tubular breathing, and bronchophony were heard below the left clavicle, extending downwards as low as the third rib; below the right clavicle a few scanty crackles and bronchophony. In the posterior base of the left lung there were cavernous respiration, gurgling, and very pronounced bronchophony. The heart-sounds were normal. The expectoration was very abundant, amounting to from twelve to eighteen ounces daily; it consisted of sulphur-coloured, flocculent masses floating in an opaque yellow fluid, and contained much black pigment. On microscopical examination of the sputum, numerous large granular cells, and on rare occasions a bit of elastic lung-tissue, were seen. Whilst in the hospital the patient continued free from fever. The pulse ranged from 72 to 96; and the temperature, taken carefully twice a day, never exceeded 98·6°. The cough was troublesome and paroxysmal, and was worst on first awaking in the morning, when it oftentimes ended in vomiting. The expectoration scarcely varied at all in character.

On May 30th the physical signs were: Large gurgling and bronchophony in the posterior base of the left lung; blowing respiration; large crepitation and bronchophony in the left mammary region. Immediately below the right clavicle the breathing was tubular; a few faint clicks were elicited by forcible breathing, and both the vocal resonance and vibration were exaggerated. The sputum continued copious, and of the character already described. I now ordered twenty minims of tincture of larch, with half a drachm each of mucilage of acacia and syrup of tolu, five minims of ipecacuanha wine and ten drachms of water, to be taken three times a day; a pill consisting of five grains of compound hemlock pill and a quarter of a grain of hydrochlorate of morphia to be taken at bedtime every night, and the linctus of morphia, already described, from time to time during the day when the cough was troublesome.

June 22nd.—Pulse 80; temperature 97·6°; resonance on percussion quite clear below the left clavicle, slightly impaired below the right. Abundant large crepitation was still heard in both the apex and the base of the left lung. Below the right clavicle the breath-sounds continued harsh and tubular; crepitation was also audible with inspiration, creaking sounds with expiration, and the vocal vibration was much more marked than on the left side. The expectoration had greatly diminished in quantity, and now consisted of small greenish-coloured, tenacious masses, but the cough remained troublesome, especially in the morning, when it still very frequently ended in sickness.

On June 29th the patient, finding himself much better, was discharged at his own request, and went into the country. He presented himself at the hospital again for examination at the expiration of a month, much improved in aspect and general health, but still suffering from cough. The resonance on percussion was still somewhat impaired below the right clavicle, quite clear below the left. There was still large crepitation in the apex, and gurgling in the posterior base of the left lung. Beneath the right clavicle scanty high-toned crackling was also heard on deep breathing. The patient has not since been heard of.

When this man came into the hospital, the history of hæmoptysis, emaciation, and night-sweats, led me at first to look upon the case as one of phthisis. Very soon, however, the entire absence of fever, the presence of large crepitation and bronchophony in the left lung without any evidence of pulmonary consolidation, the paroxysmal character of the cough, the great relief, lasting for some hours, after copious expectoration, the general character of the sputum, and, above all, the aspect of the patient, led me to the conclusion that, even though there might be phthisical mischief in the apex of the right lung, the chief distress and more prominent symptoms were due to a different cause. I had, therefore, no difficulty in deciding that the cavities in the apex and base of the left lung were the result of dilated bronchial tubes situated as usual chiefly in the peripheral twigs of the bronchial tree. Here no doubt the bronchiectasis was secondary to the attack of pneumonia, from which the patient had suffered so many years previously, and to the constant bronchial irritation which had succeeded to it. We may suppose that the nutrition of the bronchial tubes had been impaired from that time, and that the strain brought to bear upon the weakened walls by frequent fits of coughing had gradually produced dilatation of the tubes.

But although I feel no hesitation in attributing the more prominent symptoms in this patient to bronchiectasis, I am also of opinion that there is some amount of phthisical disease in the apex of the right lung, although in a quiescent condition. I am led to this conclusion exclusively by the physical signs, for nothing in the history of the case is decisive as to the presence of phthisis, not even the copious hæmoptysis that occurred three years before he came under my observation; for copious hæmoptysis is not of rare occurrence in bronchiectasis. Night-sweats, from which this patient also suffered, are, moreover, as we have seen in the cases upon which I have already commented, not unusual in this disease.

The impaired resonance on percussion below the right clavicle and in that situation only, the increased vocal resonance, exaggerated vocal vibration, and the faint crackling heard on auscultation in the apex of the right lung, were the physical signs which, taken collectively, demonstrated to me the presence of phthisical mischief in the apex of that lung. This was confirmed by the appearance, in the expectoration, of elastic lung-tissue, though in very small quantity. I need scarcely remind you that, in using the word phthisis, I do not mean in this case to infer the presence of tubercular phthisis, as that term is now employed; on the contrary, I am of opinion that the consolidation in the upper part of the right lung, in this patient, was rather the consequence of some inflammatory exudation at a former period than of tubercular deposit, because during the whole period of his residence in the hospital the temperature never exceeded the normal standard; whereas, in tubercular phthisis, however limited its extent or dormant its condition, there rarely fails to be at least a slight rise of temperature in the evening. Moreover, if there had been tubercular disease in the lung, it could scarcely have failed to have made more rapid progress during the period intervening between Christmas, when the man became so decidedly worse, and the month of May, when he sought admission into the hospital; I can, indeed, conceive nothing so likely to have excited tubercular lung disease into increased activity as the constant bronchial irritation from which the patient was suffering, and the depressed condition of health which it occasioned.

I must not turn from the consideration of this case without a few words of explanation respecting the treatment employed. When the patient was admitted there appeared to me to be two chief indications for treatment—namely, the alleviation of the pulmonary irritation, and the improvement of the general health and nutrition of the patient. With the view of meeting the first of these I prescribed the same pill of hemlock and morphia, and the same morphia linctus which I gave to the other patients, whose cases have been previously under consideration. This may, indeed, appear a very routine mode of prescribing, but the indications were very much alike in each of these cases, and the convenience of employing, as far as possible, identical formulæ, in hospital practice, is obvious. In order to meet the second indication I prescribed a bitter infusion, with ten minims of diluted nitro-hydrochloric acid, to be taken three times a day, and, at the expiration of a few days, two drachms of cod-liver oil to be taken twice a day. The patient certainly improved much under this treatment as regarded his general health, but the expectoration continuing very copious, I presently substituted tincture of larch for the bitter tonic, in the hope of diminishing the secretion from the bronchial

mucous membrane. The result was most satisfactory, for the expectoration, which had not sensibly decreased under the former treatment, now fell in quantity, from fourteen or fifteen ounces to less than two ounces in the day. It also became more homogeneous and less nummular, and consisted of a yellow-coloured muco-purulent fluid of little tenacity. Fortunately for the patient, we had not the opportunity of verifying the correctness of my diagnosis, but I entertain no doubt that it was correct, and that he really was at the same time the subject both of dilated bronchial tubes and of dormant phthisis. Some months ago I had under my care a patient in whom we found this combination of morbid lesions at the post-mortem examination. The case is one of very considerable interest, and therefore I shall read you a brief abstract of it.

Henry P——, aged fifty-eight, by occupation a joiner, was admitted into Founder ward on Sept. 2nd, 1874. Having myself been absent during the earlier part of the patient's residence in the hospital, I quote the state on admission from the very careful record of the case taken by the resident physician's assistant, Dr. Finlay. The patient, a man of temperate habits, had enjoyed uninterrupted good health until, at the age of forty, he had an attack of measles. From this, however, he perfectly recovered, and again continued well, until about a year previous to his admission into the hospital, when, after getting wet, he had a severe attack of catarrh, which left a permanent cough. About four months later he observed that his expectoration had an offensive odour, which continued to the time of his admission; he had also much shortness of breath, and frequently orthopnœa at night, compelling him to rise from bed and walk about his room, and latterly swelling of the feet and legs as high as the knees. He also stated that he had night-sweats.

On admission he was a spare, but not ill-nourished man. Pulse 90; temperature 99·7°; respiration 40. Urine normal. Tongue furred and fissured. Radial arteries atheromatous. Breath very offensive. Shoulders arched forwards; scapulæ flattened; finger-ends bulbous. Chest resonant over the front; expansion fair; breath-sounds harsh; expiration prolonged. Scanty crepitation in the second left intercostal space. In the right fourth intercostal space, near the sternum, the breathing was of whiffing character and tubular; the vocal vibration exaggerated and bronchophonic; and, on auscultation, harsh creaking sounds were heard. Over the back of the chest the resonance on percussion was nowhere quite clear. It was absolutely dull over the lower two-thirds of the right side; the breathing was generally harsh and tubular, and accompanied by dry creaking and sibilus. No moist sounds were heard on the left side. Crepitation and bronchophony and much increased vocal vibration were found in the base of the right lung. The expectoration consisted of flocculent greenish-yellow masses, floating in a transparent liquid, and had a very offensive smell.

Whilst the patient remained under observation the pulse ranged from 90 to 100; the temperature from 98° to 100·3°. It was often normal in the morning, but commonly rose towards evening. I need not trouble you with further details of the case. At first the patient in some respects improved, the cough became less troublesome, and the expectoration diminished in quantity, though it still preserved the same characters. Gurgling was always heard in the right mammary region, and at the point of the right scapula. Towards the end of September diarrhœa set in, and the patient died on Oct. 8th.

At the post-mortem examination both lungs were found adherent to the chest-walls, the right one inseparably, the left one much less firmly attached. The right lung was contracted behind the long ends of the ribs, and was covered by a firm fibrous layer of glistening aspect and semi-cartilaginous consistence, measuring one inch in thickness on the posterior surface of the organ, and diminishing considerably towards the anterior border. Two-thirds of the posterior portion of the lung were converted into a mass of semi-fibrous tissue, in which were numerous irregular cavities which freely communicated with each other. The principal cavities were situated about midway between the apex and the base, and were underlying the greatly thickened pleura. The cavities were more or less sinuous; they contained for the most part caseous semi-purulent plugs, and were in direct communication with the bronchial tubes. In many instances a tube was observed to widen out considerably on its entrance into the cavity; in others it opened abruptly into it; but, in every instance, the lining membrane of these cavities presented the same characters as those of the bronchial tubes leading to them. The lower lobe of the lung was much reduced in size, and was almost converted into a congeries of sinuous cavities full of caseous material, while the demarcation between the lobes was lost. The anterior portion of the lung was equally solid, but contained no cavities. There was much fibrous tissue here, and also numerous groups of semi-transparent miliary granulations, and other groups which had already become opaque and of a yellow colour. The lining membrane of the bronchial tubes was red, vascular, and inflamed, and they were full of muco-purulent secretion. The pulmonary pleura of the left lung was about three times the normal thickness over the lower lobe and great part of the upper lobe; it was also covered by a layer of false membrane, which could be detached with facility. Over the upper lobe, where the pleura was thinnest, it was studded with minute miliary granulations, which, in some places, coalesced, and formed a distinct layer. On section, the lung was more or less solid throughout; the solidification was in part due to the presence of tubercular granulations, partly gray, partly yellow-coloured, a few of which were isolated, but the majority were densely massed together infiltrating the organ. The surrounding parenchyma presented recent pneumonic changes, but no cavities existed in this lung.

It is difficult to believe that the morbid lesions found in this patient's right lung can have originated so recently as a year before his death. On the contrary, I infer that he had an attack of pleurisy on the right side whilst suffering from measles many years before; that the thickening of the pleura and the firm adhesion of the lung to the ribs, so firm that they could only be separated by cutting, took place at that time; and that the dense fibrous changes in the lung-tissue and dilatation of the bronchial tubes gradually ensued during the intervening period, up to the time of the definite exposure in which his last illness originated. The adhesion of the left lung to the ribs was, as we have seen, much less firm, and might well have taken place during the last months of life. It is not at all uncommon for patients with serious and slowly progressive chronic disease in one lung to enjoy fair health for a considerable period of time, even for many years, until an accession of acute catarrh cuts them off, it may be almost suddenly, after a very brief illness. This is precisely what I believe to have happened in this man's case. Notwithstanding the diseased condition of his right lung he was in fairly good health till he got wet. He then contracted bronchitis, and, the movements of the right lung being restrained by the firm adhesion of the organ to the chest-wall, the bronchial secretion could not be perfectly expelled by coughing; it therefore lodged in the bronchial tubes, became inspissated, and some of it underwent caseation. From these cheesy deposits we may presume to have originated, by infection, the miliary granulations found in the lungs and the infiltrating deposit in the left lung. The case was, therefore, finally, one of pulmonary tuberculosis, secondary to bronchiectasis and caseous deposits in the bronchial tubes.

The putrid smell of the patient's breath and sputum, so often present in bronchiectasis, sometimes leads to the suspicion of the existence of gangrene of the lungs, a suspicion generally soon negatived by the history of the case and its slower progress under observation, together with the absence of the extreme depression which almost invariably attends pulmonary gangrene. Now and then, however, true gangrene is produced by the irritating nature of the sputum lying in the dilated bronchial tubes. A patient in whom this actually occurred was under my care last winter in bed No. 14 Founder ward.

The patient, a man named P——, forty-two years of age and a shoemaker by occupation, was admitted on Oct. 28th, 1875. He was obviously a man of broken-down health, and acknowledged that he had been a hard drinker; but stated that, nevertheless, his health had been unimpaired until two days before his admission into the hospital, when he had caught cold and had begun to feel soreness of the throat and difficulty of breathing; he also had a troublesome cough and copious expectoration. This statement, so far as regarded his previous state of health, was unquestionably incorrect; for we found, at the post-mortem examination, as you will presently learn, that he must, at some antecedent time, have suffered from pleurisy. Shortly after coming into the hospital he exhibited symptoms of delirium tremens, and afterwards became so ill that we were unable to obtain a more reliable account of his previous state of health.

On admission his pulse was 100; temperature 101·8°; respiration 24 per minute. Breath very offensive. Urine sp. gr. 1021, acid, not albuminous. The resonance, on percussion, was fairly normal over the front of the chest, but the right side expanded less fully than, and rather lagged behind, the left. Resonance on percussion over the lower half of the right back of the thorax was much impaired. Over the front of both lungs the breath-sounds were harsh and accompanied by creaking rhonchus; over the lower and posterior third of the right lung the breathing was tubular, and high-toned crepitation and well-marked bronchophony were heard; at one point, about two inches below the angle of the scapula, there was gurgling and pectoriloquy. The vocal vibration was also much increased over the base of the right lung. In the base of the left lung the breath-sounds were coarse and tubular, and the voice-sounds were bronchophonic, especially at a point near the vertebræ. Moist crepitation was found in the base. Rhonchus and sibilus were heard in the upper part of the same lung. The expectoration was very copious, exceeding a pint in the day, mucopurulent, of a greenish colour, slightly frothy and very fetid. The patient himself complained much of the foul smell. The fetor increased so much during the last week of life that deodorants required to be freely used in the vicinity of the patient's bed.

At the post-mortem examination, the right lung was found to be almost inseparably attached to the chest-wall, proving the former existence of pleurisy. The bronchial tubes in the bases of both lungs were found much dilated. Ulceration had taken place in several of the dilatations in the right lung, and the surrounding lung-tissue was softened and of a black colour, and had a gangrenous odour. Excepting in the immediate vicinity of these gangrenous patches, the lung-tissue in the lower lobe of the lung was consolidated, firm, and fibrous; and the same held good, though to a less extent, with respect to the lower lobe of the left lung.

Various explanations of the immediate cause of bronchiectasis have been suggested, but each of them, taken by itself, seems to me too exclusive. As you will have observed from the cases which I have related, dilatation of the bronchial tubes may arise as a consequence of several diseases of the lungs, such as bronchitis, pleurisy, and pneumonia. Sometimes we meet with it associated with consolidation of the lungs, at other times when these organs are quite free from consolidation. It is therefore improbable that any single explanation can be applicable to every case. We may, nevertheless, assume with much confidence that in the greater proportion of cases, loss of tone and elasticity in the walls of the bronchial tubes, whereby their power of resisting internal pressure is impaired, constitutes the first step in the process. Atrophy of the bronchial walls also obviously exists in many cases, and is sometimes so considerable that the subjacent tissues can be seen through the attenuated walls of the bronchial tubes. In many other cases indeed the walls of the bronchial tubes are greatly thickened, but such thickening in a large proportion of these cases takes place, I believe, subsequently to the dilatation. The collection of decomposing secretion in the tubes, which never fails to accompany the disease, must tend to keep up bronchial irritation, and so conduce to the overgrowth of the connective tissue around the bronchi, by which their walls are thickened.

I regard the altered nutrition and decreased elasticity of the bronchial tubes as being the primary factor in the dilatation of the bronchial tubes, in the class of cases we have been considering. But it is only one factor; another is needed as well, and this I believe to be some derangement of the mechanism of the respiration, sufficient to cause increased expansive pressure upon the weakened walls of the bronchial tubes. This derangement may be caused by any condition which obstructs the inflowing current of air on its passage through the degenerated tubes towards the bronchioles and air-cells; such as plugging of the tubes with inspissated secretion, or the supervention of catarrhal pneumonia or of collapse of lung. The sudden diminution of space, in such circumstances, for the reception of air in the remoter parts of the lungs, without corresponding diminution of the amount of air admitted during inspiration, must obviously bring increased air-pressure to bear upon the walls of the bronchial tubes; causing such over-distension that, if these have already lost their elasticity, they will gradually yield, and dilatation of the tubes will take place. Again, pleuritic adhesions, by impeding the normal movements of the lungs during respiration, must so derange the equilibrium of air-pressure upon the surface of the bronchial tubes as to bring undue force to bear upon the walls of certain parts of the bronchial tree. This force may be insufficient to produce dilatation of tubes which still preserve their normal elasticity, but may yet be quite sufficient to cause them to give way if they are already weakened by previous disease.

There still remains one form of bronchiectasis to which I must briefly advert. It is that which we meet with in cirrhotic lungs. This was, many years ago, described by Sir Dominic Corrigan, and you will find upon the table several specimens which illustrate it. I beg, more especially, to direct your attention to one in my hand, which was taken from the body of a stonemason who died under my care many years ago in Founder ward. When the patient was admitted into the hospital we found very deficient resonance on percussion over the upper and anterior part of the chest, and also over the whole posterior portion. Indeed, the dulness was almost absolute over the left mammary region and the whole of the left back of the thorax. Auscultation revealed the presence of cavities in the left mammary and supra-spinous regions. Notwithstanding these evidences of serious disease the patient did not appear to consider himself as very ill; he had the aspect rather of a person suffering from pulmonary obstruction than from phthisis, and might, apparently, have survived some time longer but for the occurrence successively of attacks of diarrhœa and of profuse hæmoptysis, under which his strength soon gave way. At the post-mortem examination the left lung was found to be firmly adherent to the posterior wall of the thorax. The posterior part of the upper lobe of this lung was converted into an extremely hard, dense, solid tissue of gristly consistence, which presented on section a perfectly smooth surface. The bronchial tubes in this consolidated portion of the lung were much dilated, and were, doubtless, the seat of the large crepitation heard during life. An irregular cavity, about two inches in diameter, was also found in the lower lobe, and it was evident that the hæmorrhage had proceeded from this cavity. In this and similar cases the dilatation of the bronchial tubes, as was believed by Sir Dominic Corrigan, is certainly in a great measure caused by the shrinking of the consolidated lung-tissue surrounding the tubes, resulting from the contraction of the proliferated connective tissue. It differs, therefore, from the form of bronchiectasis to which our attention has been hitherto directed, in which internal pressure acting upon the walls of degenerated bronchial tubes constitutes the essential factor in producing the dilatation, in that the dilating force is situated mainly outside, and not within, the bronchial tubes. This force, as already said, arises from contraction of the lung-tissue around the tubes, aided, it may perhaps be, in some degree by the pressure of the air upon the walls of the tubes and the expansive action of the thorax during the act of inspiration. Sometimes we undoubtedly meet with cases in which the two forms of bronchiectasis are combined in the same patient. In the case of P——, which I recently related, the bronchiectasis was perhaps of this mixed kind, having probably been caused partly by internal pressure upon the walls of the bronchial tubes, partly by the expansion of the tubes caused by the contraction of the consolidated parenchyma surrounding them.

As regards the treatment of bronchiectasis as an independent disease, I have no special suggestions to make. The disease is always a secondary one, and its treatment resolves itself, therefore, into that of the primary disease, together with the employment of such palliatives as may be required for the alleviation of the most distressing symptoms. When the sputum is very offensive, inhalations of turpentine or of creasote are often useful in diminishing the fetid odour, which is sometimes very distressing to the patient as well as annoying to the attendants; and when the expectoration is very copious, balsamic remedies, such as ammoniacum, compound tincture of benzoin, or tincture of larch, are very frequently of great service.

BEQUESTS, &c., TO MEDICAL CHARITIES.—The Cheltenham General Hospital and Dispensary has received £1000 under the will of Mrs. George Capel. The Sheffield General Infirmary has received £200 under the will of Mrs. F. H. Miles, of Firbeck, and donations of £105 each from Miss Alderson and Miss A. M. Alderson, of Tickhill. The Gloucester Infirmary has received £210 under the will of Mr. James Weekes James, of Clifton.

NOTE ON THE

USE OF THE CALOMEL VAPOUR BATH.

BY HENRY LEE, F.R.C.S.,
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IN the *American Practitioner* for September, 1877, Dr. Yandell has given perhaps the fairest and most impartial account of the different modes of using mercurial fumigation that has yet been published. It is twenty-three years, Dr. Yandell remarks, since he commenced the use of the mercurial vapour bath, and he has used it ever since. Other forms of mercurial treatment are also employed, but, where circumstances permit of it, he prefers that to any other.

Dr. Yandell commenced his experiments with what he conceived to be Mr. Langston Parker's apparatus, with the grey oxide of mercury; but found that the degree of heat necessary to vaporise the powder a very serious objection. The bisulphuret was next tried, without benefit. The irritating fumes of the sulphur and the heat acted injuriously. It was then found that the so-called cinnabar that he used contained ninety per cent. of lead to ten per cent. of mercury. Unadulterated cinnabar was now used, mixed with the grey oxide, and the results obtained were more satisfactory than with either alone. Still the extreme heat necessary to vaporise the latter, and the suffocating fumes of the former, told heavily against their use. At length calomel was tried, and "the mere mechanical troubles with the fumigations were now virtually at an end."

Dr. Yandell found, however, that his patients did not improve so rapidly as mine did in London, and asks, with much point, what the explanation can be? We both used the same apparatus, and the same quantity of calomel, and why should the same treatment cure quickly in London, and not cure quickly in Louisville? The solution of this question is not difficult, and for the benefit of others I wish to answer it publicly rather than in a private communication.

The great majority of those at first treated were hospital cases, and, as Dr. Yandell says, the London LANCET of that day abounded in reports of such cases. He gives me the credit, which I also claim, of having reported the cases faithfully. The patients, often several in succession, were placed in a box in which the ten or fifteen grains of calomel was volatilised. The room in which the box was contained was small, and, looking back upon the rapid and almost uniform results obtained, I have no doubt whatever that the patients got the benefit of some of the calomel that was left in the box, and perhaps in the room, in addition to the ten or fifteen grains that was devoted to their individual use. In private practice I generally directed patients to use the same cloak night after night, and to sleep in it,[1] and thus the calomel vaporised one night was again to some extent utilised the next.

Dr. Yandell found that in order to produce the desired effect he had often to use one scruple, half a drachm, or a drachm of calomel for each bath. Where patients like to have a clean cloak for their baths, and wash the calomel off by means of baths, I have, as he suggests, found the same thing, so that substantially his experience and my own coincide.[2] It may be well here to mention that I now use calomel that has been previously resublimed two or three times. Ordinary calomel is less affected by heat or moisture than any other preparation of mercury, but still it does contain a certain amount of hydrochloric acid, the presence of which may be indicated by a piece of moist litmus-paper held in the fumes as they arise. This free hydrochloric acid is driven off in a great measure by sublimation, and the pure calomel thus prepared is less irritating than the ordinary calomel of commerce. It should also be observed that the water I originally used was principally for the purpose of preventing irritation from any fumes that might be generated during the action of the baths, and I find that an ounce on each occasion is quite sufficient. If more water be employed, more heat is necessarily required in order to boil it. The vapour of the water is in part deposited on the patient's skin; this must in some way be removed before he is comfortable, and some of the calomel is necessarily removed with it. Dr. Yandell uses a pint of water in the apparatus which he has depicted, and the patient has thus a combined vapour and calomel bath. This no doubt may be very useful where such a combination is intended, but the effect is often very different from that produced by the calomel bath alone: a much greater amount of perspiration is induced, and this the patients, when the bath is repeated night after night, cannot bear. The perspiration also tends to remove the calomel from the skin.

Dr. L. P. Yandell is of opinion that brisk friction after the sweat, made with the coarsest towel, and until the skin is all of a glow, actually promotes the action of mercury, and conduces to its more rapid absorption. This no doubt may be the case, but it involves a different principle. The calomel is rubbed into the skin in a similar way as the mercurial ointment was in olden times.

Savile-row.

[1] The cloak usually employed is called moleskin, and makes a very comfortable night-dress.

[2] Half a drachm of calomel is the quantity which practically I now recommend to be used for each bath

NOISES IN THE HEAD; THEIR ETIOLOGY, DIAGNOSIS, AND TREATMENT.

BY EDWARD WOAKES, M.D. LOND.

PERHAPS no symptom is so generally associated with vague ideas as to its pathological import, or even as regards its location, as is tinnitus. In proof of this assertion, it will suffice to notice the following case from a work on aural surgery bearing date 1876. The patient had suffered from distressing noises in his left ear for two years, and had undergone treatment for his heart, his lungs, his stomach, his kidneys, and his liver, "according as each of these organs had been diagnosed as the primary cause of his complaint"; and at the time the case was reported he was suffering the "additional inconvenience of a large seton in the nape of his neck." An inspection of the ear revealed a large pulsating polypus, the beating of which was controlled by pressure on the left carotid.

The confusion surrounding this particular symptom is, indeed, not to be wondered at, seeing that all writers on the ear, from Wylde to Roosa, agree that it is impossible as yet to differentiate the causes on which the various forms of tinnitus depend. The subject is one, therefore, demanding investigation; the more so as it will be found to involve problems less easy of solution than that comprised in the instance just referred to. Doubtless much of the perplexity in question arises from the habit of referring the noises, when their origin is not very apparent, to certain subjective conditions of the nervous system, more especially of the auditory nerve.

It will clear the ground I propose to traverse to dispose of these subjective phenomena at starting. While I do not affirm that such a condition never obtains, we take our stand on the distinctly objective causation of every phase of tinnitus which may come before us, contending that for a sound to be heard it must have a prior existence in some abnormal conditions capable of giving rise to it. The determination of the nature of, and the methods of recognising, such objective states, together with the treatment suitable for each, are the subjects I propose to consider in this paper.

As regards the noises themselves, it will be conceded that among the minor ills of life, common alike to all classes of society, they constitute one of very frequent occurrence; while not rarely they become a veritable thorn in the flesh, pursuing the victim with relentless torture by night as well as during the day. The records of our asylums show that insanity occasionally results from this cause. Some patients tell us their noise resembles the boiling of a kettle; farm labourers who have to do with modern agricultural implements compare theirs to a "'chine going round"; in some it is like the roar of the distant sea; or this, again, is varied with cracks and explosions; while many bear witness to hearing always a sort of rhythmical thud, as though their head were the anvil of some unharmonious blacksmith. As if to satirise the infirmity, a large proportion of its subjects are more or less deaf to the sounds of the outside world. Under such a complication of evils, it will cease to be matter

of surprise when we find in the literature of the subject the details of not a few patients who have sought in self-destruction a respite from their persistent torture.

Pursuing the clues suggested by certain anatomical and physiological relations of the ear we are enabled to reduce these varying forms of tinnitus to a systematic classification. The following scheme will be found to include most of these, and its adoption will facilitate their study :—

Local morbid condition.		Character of sounds.
1. Labyrinthine congestion	Arterial	Pulsating noises.
Do. do.	Venous	Rushing noises.
2. Anæmia, aneurism	Extra aural	Pulsating noises.
3. Fluid in tympanum or Eustachian tubes	Catarrh of middle ear... ...	Bubbling and gurgling noises.
4. Congestion of membrana tympani, cavity of tympanum, or Eustachian tube, or of all these together ... ... inducing	Chronic non-suppurative inflammation of ear	Tidal noises.
5. Undue contraction of intrinsic muscles	Reflex irritation of tensor tympani nerve from otic ganglion	Similar noises.

All the above may coexist in the same patient at the same time, or may succeed each other, or be variously combined in different stages of the same case.

Commencing our examination with the first on the list, it is to be noted that the perceptive portion of the auditory apparatus, known as the labyrinth or internal ear (including the vestibule, semicircular canals, and cochlea), receives its vessels from the vertebral artery, a totally distinct source to that which supplies the more external or conductive parts of the ear. Two points suggest themselves in connexion with this fact—1st, the very distant source from which this artery is derived—viz., the subclavian at the root of the neck; and, 2nd, that the nervi vasorum by which its calibre is regulated come from the inferior cervical ganglion of the sympathetic, which brings this vascular tract into some very special relationships having an important bearing on the phenomena of labyrinthine vertigo, of which tinnitus is one; it is therefore a point of great value in this inquiry. The veins which discharge the blood from the labyrinth pass into the superior petrosal sinus, and, remembering that this small canal is directly connected with the two large receptacles of venous blood in the cranium—viz., the cavernous sinus in front and the lateral sinus behind,—it is easy to see how any obstruction to the venous circulation will proportionately retard the outlet of blood from the labyrinth.

Now, if the internal auditory artery, derived from the source above indicated, become dilated by diminution of its natural tonus (which is mediated by the sympathetic plexus just described), it will not only contain more blood, but will occupy more space than in its normal relations it should do. Remembering the extremely sensitive auditory apparatus amongst the nervous expansion of which it ramifies, it is easy to understand that under these circumstances its beats become audible to the patient, and that they are synchronous with those of the heart. *Here, then, we have the indications for differentiating one set of noises.* When a patient tells us he has a knocking sound in his ear (generally this occurs on one side only at a time, though it may change sides), we know that the circulation in his labyrinth is hyperæmic. As an example of this, I was told by a patient a short time since that he had a knocking noise in his left ear, and that he had counted on his watch eighty-four knocks or beats in a minute. Of course, this corresponded with his heart's action. This form of pulsating tinnitus may occur in an otherwise healthy ear from causes connected with the vasomotor system of nerves. When associated with deafness, as it often is, these pulsating noises may remain after treatment has removed any other abnormal condition. It is necessary to guard against the notion that all congestive conditions of the labyrinth are of necessity indicated by pulsating sounds, because the buzzing noises and stuffy sensations in the head due to taking large doses of quinine must, I believe, be referred to this part of the organ of hearing, but the usually undefined character of pulsation suggests that the symptom is due to fulness of the venous as well as of the arterial system.

I treat this class of noises in the head by the internal administration of hydrobromic acid. The treatment in question arose out of Dr. Fothergill's observation that this drug antagonises the aural symptoms caused by large doses of quinine when administered with it. A closer examination of the symptoms accompanying the condition known as "chinchonism" will explain the *rationale* of the treatment of labyrinthine congestion by hydrobromic acid. As a thoroughly reliable authority on this subject I quote the following description of the condition from Phillips's Materia Medica, a work which from its scientific character will repay attentive study:—"When a patient is saturated with excessive doses of quinine, he gets loud ringing noises in the ears, splitting headache, vertigo, amaurosis, sometimes even delirium. In animals a fatal dose of quinine has often produced convulsions, and paralysis of the hinder extremities. It would appear that the lowered sensibility of parts and the diminished muscular action are due not to direct paralysis of nerves, or to any interference with muscular irritability, but to a diminished reflex action. Irritation of the skin, followed by desquamation, occasionally occurs, and cases have happened in which the whole skin of a hand or even of a limb has come off like a glove. It further produces in some persons great acceleration of the heart's action, and of the respiration, so that the palpitation and hurried breathing cause much distress."

Reverting to the relationship which I have shown to exist between the vertebral artery and the inferior cervical ganglion, it will be seen that the symptoms just detailed are due to interference with the circulation of the tissue tracts supplied by the vessels *over which this ganglion exercises inhibitory control.* It may further be affirmed that the toxic effect of quinine (very distinct from the absorption of small doses) is to annihilate the inhibitory function of this vasomotor centre, and by paralysing the vessels (to the ramifications of which it is distributed) allows them to become gorged with blood. The symptoms detailed enable us to map out these districts. Thus, taking them in the reverse order to that of the quotation, we see in the excitation of the heart's action an interference with the inhibitory influence over that organ normally exercised by the lower cardiac nerve, proceeding from the inferior cervical ganglion. In the desquamation of the skin of the upper extremity, especially of the hand, we trace the ultimate result of an over-supply of blood to this member in consequence of the distended state of the brachial artery and its branches when its inhibitory nerves, also derived from the same ganglion, are paralysed by the drug. A similar state of things is seen in the area supplied by the vertebral arteries, whose equilibrium is likewise mediated by the ganglion in question. Owing to the great accession of blood resulting from this cause, to the medulla oblongata and cerebellum is due the disturbance noted in these nerve-centres, in which the labyrinth participates. To the consequent congestion of the latter organ are due the vertigo and tinnitus just referred to. It is worthy of remark that the labyrinth, an organ of special sense, being seated at the extreme periphery of this system of vessel area, is by a well-established physiological law the first to appreciate the indications of what is wrong in the patient's system. It thus acts like a sentinel to warn by the prominence of its outcry against the continuance of the drug, which, if persisted in, will induce those further congestive brain conditions soon to end in profound headache and delirium. Many other phenomena of great practical import are associated with the disturbance of the anatomical relationship thus briefly reviewed; their consideration belongs rather to the whole subject of vertigo, stomachic as

well as labyrinthine, and will be further studied when treating of this subject.

Therapeutic experience had already empirically established a sort of affinity between some of the symptoms akin to those of chinchonism, but referable to other causes (such as giddiness, headache, and ringing noises in the head), and the hydrobromic salts. Thus epilepsy has been long successfully treated, a condition corresponding to the convulsions produced by quinine poisoning in animals. The successful use of the acid to relieve labyrinthine tinnitus is another piece of evidence in the direction indicated. Two important issues are deducible from the foregoing facts—viz., that quinine and hydrobromic acid are each specifically related to the tissue tracts over whose circulation the inferior cervical ganglion exercises inhibitory control; and that, therapeutically, these drugs are antagonistic, the former suspending, the latter increasing, the inhibition of the vaso-motor centre constituted by the ganglion. Physiologically, we are guided to the corollary, that distinct vaso-motor areas exist in the animal body, and that changes may take place in the circulation of such areas which are purely local in the first instance; that such changes are equivalent to local hyperæmias, or anæmias, according as the vaso-motor influences of the area are suspended or added to; and one or another of these conditions affords the clue to a vast number of pathological states; and, further, that any true system of therapeutics must be based on the recognition of the principle now enunciated.

Returning to the treatment of pulsating tinnitus, it had long been apparent to the writer that these noises had reference to the labyrinth, because they were so frequently associated with other symptoms of Menière's disease—giddiness, headache, &c.—the existence of which symptoms also established its parallelism with the tinnitus of chinchonism. Thus the inference became obvious that the remedy for the latter would probably turn out to be equally curative of the noises produced by some forms of aural disease. The first case to which, in an experimental way, the hydrobromic acid was given for the relief of these pulsating sounds confirmed the correctness of the above line of argument by its immediate and marked success. It may be taken as a typical one from over a score of others equally satisfactory. The patient had been treated for suppurative inflammation of the middle ear, with polypoid excrescences in the external canal, all of which objective conditions being removed, he still complained of throbbing sounds, with giddiness and headache, increased by stooping or exercise. Hydrobromic acid, in fifteen-minim doses in water, was prescribed every four hours. Relief to these latter symptoms was immediate, and they shortly disappeared altogether. It is satisfactory to note that the experience of other observers has amply verified this result, so that the drug may claim the position of a specific remedy for congestive labyrinthine conditions, providing always the auditory apparatus be first relieved of any well-marked morbid process which, by its presence, might tend to keep up excessive vascular action.

The next class of tinnitus includes those phases of the symptom which depend on causes other than aural, and they are tolerably numerous. One of these has reference to the circulatory system at large. Anæmia, whether due to exhausting discharges, direct loss of blood, chlorosis, &c., is accompanied with that peculiar sound heard over the large arteries, known as "bruit de diable." When it is remembered that the internal carotid passes very near to the labyrinth in its course through the temporal bone, it is not surprising that the patient should himself appreciate any abnormal sound occurring in it, when such sound is audible to an outside observer. For the same reason aneurism of the aorta, or its immediate branches, communicates by conduction its peculiar form of tinnitus, and especially is this the case in intracranial aneurism. In some cases of heart disease, especially in complete excentric hypertrophy, any extra exertion is attended with buzzing in the ears.

From the following case it would seem that an overloaded state of the portal circulation is sometimes associated with tinnitus, a circumstance that becomes quite intelligible if we bear in mind the facts of the relation of the veins of the labyrinth to the large sinuses of the brain, as noted above. A medical acquaintance had for several weeks experienced a dull ringing sound in the head, with a general feeling of malaise, and incapacity for any sort of head-work. He was induced to take a dose of Carlsbad salts, with the result of getting rid of all his symptoms, the tinnitus included. A further instance this of the auditory apparatus performing a sentinel-like office in the economy, warning of distant mischief.

The foregoing conditions, which are the common ground of every practitioner, suggest to the specialist how wide and general should be his grasp of the cases occurring in his particular department of practice. The fact, however, that murmurs, produced at a greater or less distance from the ear, are appreciated by this organ in the form of tinnitus has an important bearing on the line of argument adopted in this paper, as will shortly be apparent.

On analysing the very tangled residuum of noises which remain to be examined, they will be found to group themselves into two classes: one more or less intermittent, comprising a series of crackling, bubbling, or explosive noises; the other generally continuous, of a buzzing, singing character, which, making due allowance for the many fanciful descriptions of the patient, more often likens itself to the tidal sound produced by holding a shell to the ear than to anything else.

Respecting the first group of gurgling or bubbling noises, which the patient will compare to the bursting of bubbles in the head, these are due to the presence of fluid in the middle ear or the Eustachian canals. This mucoid or muco-purulent fluid, being formed in an air-chamber communicating with the throat, is subjected at frequent intervals to the passage through it of bubbles of air. Gases may also be generated in it, and escape in a similar way. The ready relief of these cases will depend upon the patulence of the Eustachian tube, and the ease with which treatment can be applied directly through it to the ear; and this again will depend on whether the state of the naso-pharynx is such as to admit of the treatment being carried out. The following case in point occurred in the person of a woman who presented herself at the Ear Dispensary a short time since. She had a most worn and distressed appearance, having had no sleep for three nights, in consequence of the intensity of the gurgling noises in her left ear. The nostril on this side was obstructed, owing to deformity of the bones, but, by giving a large curve to the catheter, the left Eustachian tube was entered from the right side. On forcing in air, much gurgling ensued, but when all the mucus was thus cleared away, the tinnitus entirely ceased. Of course the relief from such a palliative measure was only temporary, but it lasted nearly a week. Such a case would require a course of treatment directed to the cavity of the tympanum and the tube as well as to the post-nasal region. Solutions of carbonate of soda with carbolic acid, applied by means of the post-nasal syringe, as well as injected through the anterior nasal orifices, are of paramount service here. Should the state of things just described coexist with perforation of the drum-head, treatment is much facilitated, it being comparatively easy to inject suitable lotions by the external meatus right through the middle ear to the throat. It is often surprising how much muco-purulent secretion may in this way be washed out of the cavity of the tympanum and the mastoid cells communicating with it. The further treatment of these cases resolves itself into that for chronic suppurative inflammation of the middle ear.

When the membrana tympani has been chronically diseased, it sometimes loses its elastic character, and becomes thin and harsh like parchment. In this state its movements are, according to Hinton, attended with creaking noises very annoying to the patient. In other cases a portion of mucus has become inspissated and adherent to the ossicles, or it may even form a film over the tympanic surface of the membrane, causing the patient to be very deaf. This may at length be ruptured, either spontaneously or by the action of the intrinsic muscles on the parts to which it is adherent, such a rupture being attended with a very audible report to the patient, who henceforth is much improved in hearing power. Similar as regards its origin was a somewhat unusual symptom complained of by a gentleman who consulted me on the subject. He said there was "something loose in his head," and that he felt it roll about whenever he moved suddenly. There was no reason to doubt this statement, and as he had had trouble in his ears earlier in life, it seemed probable that a past attack of tympanic catarrh had left behind it a legacy of unremoved secretion, which had gradually dried up, and, being unattached, moved about in the cavity of the drum with the motions of the head. Acting on this supposition, he was given a powerful insufflation with an ordinary Politzer bag. Immediate cessation of the symptom followed this proceeding, and as the relief was

permanent, it is probable that the force of the current of air drove the loose particle into a corner and wedged it there, to the great relief of its possessor.

(To be concluded.)

ABSTRACT OF

SIXTEEN CASES OF POST-PARTUM HÆMORRHAGE TREATED BY THE INJECTION OF HOT WATER INTO THE UTERUS.

WITH REMARKS.

BY LOMBE ATTHILL, M.D.,
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AT the December meeting of the Dublin Obstetrical Society I gave the details of two cases of post-partum hæmorrhage treated by the intra-uterine injection of hot water. Since then, the practice has been carried out in all suitable cases occurring in the hospital and in the extern maternity in connexion with it. Appended is a table of all these cases, with an abstract of the leading features of each, for the preparation of which I am indebted to Dr. J. C. Cameron, of Montreal, who is at present studying here. These details speak for themselves. I shall merely add—1st, that we do not, as a rule, employ hot water in cases of post-partum hæmorrhage till the application of cold has failed to arrest it; 2nd, that it is most markedly beneficial in the case of weakly, delicate women, and in those in whom, profuse hæmorrhage having been checked, blood continues to be lost in small quantities, the uterus alternately relaxing and contracting; 3rd, that, for its successful application, the tube of the syringe must be carried fairly into the uterus; 4th, that the temperature of the water must not be under 110°, and that it may safely be used at 115°.

In no single instance did any unpleasant symptom follow; and all the patients, with the exception of case No. 9, stated that they experienced feelings of the greatest comfort and relief from the treatment. In the case referred to, in which pain followed the injection of the hot water, we were uncertain whether the ovum had been expelled or not. I had but once previously injected hot water in a case of abortion, but this woman was in a very critical state; she was cold and faint, and I stated to the class that if the ovum had not come away the hot water might stimulate the uterus to expel it, and that if the uterus were empty I believed it would arrest the draining which still continued. This case is, in my opinion, a very important one, and will lead me for the future to treat hæmorrhage occurring in cases of abortion in a similar manner.

Cases in which Hot Water was injected into the Uterus for Post-partum Hæmorrhage.

No.	Date.	Name.	Age.	No. of pregnancies.	Hours in labour.	Minutes in third stage.	Pulse before injection.	Pulse immediately after.	Pulse next day.	Intern or extern patients.
1	Nov. 20th, 1877	Mary M.	33	14	2½	15	162	120	112	Intern
2	,, 30th ,,	Mary M.	25	3	17	15	152	130	118	,,
3	Dec. 10th ,,	Rosa F.	20	1	22	10	145	90	95	,,
4	,, 16th ,,	Bridget M.	28	5	13	15	130	110	100	Extern
5	,, 22nd ,,	Sarah S.	29	1	10½	30	140	126	130	Intern
6	,, 24th ,,	Eliza D.	21	1	24	5	150	120	90	,,
7	,, 27th ,,	Julia D.	24	3	17	10	130	110	105	,,
8	,, 29th ,,	Margt. R.	35	1	10	15	140	128	130	Extern
9	,, 30th ,,	Maria D.	26	3	—	—	120	110	106	Intern
10	,, 31st ,,	Ann G.	30	7	8	5	144	120	104	Extern
11	Jan. 2nd, 1878	Agnes W.	19	1	10	2	160	132	120	,,
12	,, 3rd ,,	Mary K.	30	3	5	5	120	90	104	,,
13	,, 4th ,,	Margt. F.	28	1	15	15	160	140	120	,,
14	,, 14th ,,	Jane W.	29	5	7	5	110	88	74	Intern
15	,, 16th ,,	Mary M.	24	3	16½	15	Could not be counted.	106	72	,,
16	,, 19th ,,	Ellen F.	36	12	—	—	120	108	110	,,

CASE 1.—Profuse hæmorrhage came on immediately after the placenta was expelled. Cold was applied to the vulva, fundus, and thighs; ergot was administered, and cold water was injected into the vagina; trickling notwithstanding kept on, until the patient was cold, clammy, and almost pulseless. The vaginal tube was then passed well up to the fundus, and water at the temperature of 110° F. injected by Dr. Atthill. The woman began to rally immediately, hæmorrhage ceased, the pulse improved in volume and became less frequent, and her life was saved. Recovered without a bad symptom.

CASE 2.—Hæmorrhage was mainly *internal*. Three hours after delivery she seemed weak, and was noticed to sigh heavily. The uterus was found distended with clots, which were readily expelled by applying friction and pressure to the fundus. Trickling went on incessantly, which ergot, cold, and pressure failed to check. Hot water was at last injected; bleeding ceased immediately, and the patient experienced instant relief from severe uterine pain which had caused her great suffering from the time of delivery. A fibroid existed in the anterior wall of the uterus in this case.

CASE 3.—Trickling came on shortly after the expulsion of the placenta. Ergot was administered by the mouth and hypodermically, but without effect. The injection of hot water at once stopped the bleeding, and the patient made a rapid recovery.

CASE 4.—The head was detained at the brim by undue prominence of the promontory of the sacrum. Forceps were applied. After the expulsion of the placenta oozing kept up, which administration of ergot hypodermically failed to check. The injection of hot water stopped the hæmorrhage immediately and completely. Recovery excellent.

CASE 5.—Forceps were applied on account of delay in the second stage. Several large subperitoneal fibroids existed on the upper border and anterior surface of the uterus. After the expulsion of the placenta, which had been allowed to remain for half an hour, the uterus remained very flabby, and showed no tendency to contract; and oozing kept up. Ergot, hypodermically and by the mouth, failed to produce any effect; hot water was accordingly injected, with immediate and complete success. No cold applications were made in this case.

CASE 6.—Forceps were applied for delay in the second stage. Considerable hæmorrhage came on an hour after delivery, which pressure, ergot, and cold failed to check. Hot water was injected, and the uterus contracted at once. A short time afterwards it relaxed somewhat, and slight trickling went on for two hours. A dose of ergot made the uterus contract, and no more bleeding occurred.

CASE 7.—After delivery, oozing went on so quietly that it was not noticed. At the end of six hours a quantity of blood had escaped into the bed, and the uterus was found to be relaxed, and nearly up to the ensiform cartilage. A quantity of serum, mixed with small clots, was escaping from the vagina. The pulse was very weak. Pressure failed to dislodge the clots. Hot water was injected, the uterus contracted somewhat, bleeding ceased, and the pulse improved in volume. Infusion of ergot was given every hour, and at the end of six hours and a half a clot as large as a placenta was expelled; the uterus contracted firmly, and no more bleeding occurred.

CASE 8.—Profuse hæmorrhage came on immediately after the expulsion of the placenta. Pressure and friction over

the fundus, cold applications to the thighs, vulva, and fundus, ergot by the mouth, the injection of cold water into the vagina, and, finally, into the uterus, were all tried in succession, and utterly failed to stop the bleeding. A trickling, not much, but persistent, kept on in spite of everything. Hot water was at last injected; the uterus contracted, and the bleeding was controlled. In this case there was a severe laceration of the perineum, and the pulse and temperature remained high for a week, but eventually a good recovery was made.

CASE 9.—An abortion at the third month. In her first pregnancy the child was born alive; in her second, she aborted at the sixth month. On the present occasion bleeding began on Dec. 26th, and continued slightly, with little pain, till the 30th at noon, when severe pain in the back and bearing-down pains came on. At 5 P.M., a great gush of blood and clots made her very weak. She reached hospital at 7.15, faint and helpless, her clothes dripping with blood. On examination, the os was found to be very high up, and patulous. Although nothing could be felt protruding, blood flowed freely. Hot water was at once injected into the uterus. Instead of a feeling of relief and comfort, such as was experienced in the other cases, severe pains, similar to labour pains, at once set in, the uterus contracted firmly, and no more bleeding occurred.

CASE 10.—A delicate, anæmic, phthisical woman. Has had six miscarriages, this time having borne her first living child. A great gush of blood came before the placenta was expelled, deluging the bed and reducing the pulse to a flicker. The placenta was at once expressed, along with the clots, which filled the uterus. Pressure and ergot failing to check the bleeding, cold water was injected into the uterus; slight contraction was produced, but the ooze still kept up. Hot water was at length injected into the uterus; firm contraction came on at once, the clots were expelled, and bleeding ceased. The pulse improved in volume markedly, and in four hours had fallen to 90. This patient's life was in imminent danger.

CASE 11.—Premature labour at the eighth month. Hæmorrhage began immediately after the birth of the child, and the placenta was expressed at once. Pressure, cold, and ergot failed to stop the bleeding, and in half an hour the woman was blanched and almost pulseless, the uterus alternately relaxing and contracting. The clots were removed as much as possible, and hot water injected; slight contraction took place, but the ooze still went on. A portion of membrane which had been nipped by the os internum was then removed, and cold water infected into the uterus, but the ooze still went on. Hot water was a second time injected, and the uterus, responding to the stimulus, contracted firmly, expelled clots, and no more bleeding occurred. In three hours the pulse had fallen to 120, and had improved in volume.

CASE 12.—Profuse hæmorrhage came on immediately after the birth of the child, and the placenta was at once expressed. Ergot, hypodermically and by the mouth, and cold applications, failing to check the ooze, hot water was injected. The uterus contracted firmly, and the bleeding stopped. Slight oozing came on again for an hour, and then finally ceased.

CASE 13.—The fœtal head was large and much ossified. After five hours' arrest in the second stage forceps were applied. After extraction of the child the uterus contracted well, but several gushes came on just before the expulsion of the placenta. After the placenta came away the contraction remained good for fifteen minutes, when suddenly the uterus relaxed, and as suddenly contracted, sending a great gush of blood fully a yard from the bed. Friction and pressure were applied to the fundus. Ergot was given, and cold water injected into the uterus. Notwithstanding all this, another heavy gush deluged the bed and floor, and the woman lay in a very critical state, blanched and fainting. Hot water was injected without delay, and the uterus contracted firmly; bleeding ceased, and the patient recovered without a bad symptom.

CASE 14.—Patient has in previous labours been subject to post-partum hæmorrhage. Immediately after the expulsion of the placenta two gushes of blood came, followed by a continuous ooze. The uterus was soft and flaccid. Ergot was given, cold applied to the vulva, and cold water injected into the uterus; but the ooze kept up, and the pulse rose from 90 to 110, and grew feebler. Hot water was then injected, and bleeding ceased. After the lapse of an hour some clots were expressed, and no more bleeding occurred.

CASE 15.—A very flabby, anæmic patient. After the expulsion of the placenta, the ooze kept up slightly, in spite of ergot and cold applications to the vulva, till the woman became blanched, and the pulse so feeble that it could not be counted. Hot water was injected, and bleeding ceased, and the pulse improved in volume. A slight ooze returned after an hour, but a hypodermic injection of ergot stopped it. Next day the pulse was of good volume. The patient made a good recovery.

CASE 16.—An abortion at the fourth month. Received a blow on the abdomen on the 17th; pains began on the 18th, and at 11.30 P.M. she began to bleed profusely. She lost a large quantity of blood, and when she reached the hospital at 1.30 A.M. on the 19th she was weak and blanched. The os was patulous, with the ovum protruding through it. The ovum was removed without difficulty, but the uterus was full of clots, and bleeding still continued. Pulse very feeble; hot water was injected, and the clots washed away. Bleeding ceased at once, and the pulse improved in volume. No more bleeding came on, and the patient made a good recovery.

Dublin.

NOTE ON THE

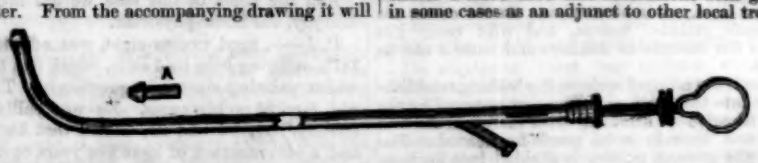
LOCAL TREATMENT OF SOME BLADDER AFFECTIONS;

WITH DESCRIPTION OF A PESSARY-CATHETER.

BY REGINALD HARRISON, F.R.C.S.,

SURGEON TO THE LIVERPOOL ROYAL INFIRMARY.

I HAVE recently been using in the local treatment of affections of the bladder soluble pessaries, introduced by means of a special instrument manufactured for me by Messrs. Krohne and Sesemann, and which I have designated a pessary-catheter. From the accompanying drawing it will



be seen that the instrument consists of a metallic catheter, open at the end, into which is received a cocoanut-butter pessary (A), containing the requisite drug. After the urine has been allowed to run off, by pressing the stylet the pessary is projected into the bladder, when the instrument is at once removed. The pessaries have been specially prepared for me by Messrs. Symes, of Hardman-street, Liverpool, and contain various agencies, including morphia, opium, bismuth, nitrate of silver, perchloride of iron, and belladonna. The pessaries are so shaped as to form an end for the catheter; and their exposed surface is hardened by a layer of spermaceti, so as to prevent their becoming dissolved in their passage down the urethra. The instrument has been made for me in two sizes; in one the end corresponds with a No. 12 bougie, in the other with No. 8. Pessaries to fit each have been made for me by Messrs. Symes.

In several cases of irritable bladder arising from various causes I have used this instrument with great advantage; in some cases as an adjunct to other local treatment, such as washing out the bladder, catheterism, &c. The treatment of many bladder affections is only to be effectually carried out by local measures, and, in addition to those we are already provided with, I believe the instrument I have now described will be of service. I have certainly found it so, as it enables the surgeon by one operation, first of all, to empty the bladder, and, secondly, to apply what is required directly

to its mucous surface. In this way, I have frequently given a patient a good night by a morphia pessary, where rectum suppositories and other means have failed.

Liverpool.

HELOUAN, EGYPT, ITS BATHS AND MINERAL WATERS.

BY T. J. PYLE, M.D.,
MEMBER OF THE GENERAL MEDICAL COUNCIL.

I HAVE just returned from a fortnight's visit to the Baths of Hélouan, which were first prominently brought into notice by Dr. W. Reil in 1874. It is to this gentleman, who was formerly director and physician to the baths, that I am indebted for much of the following information.

It was two years ago when I first visited these springs, when I found the travelling and other difficulties too great for invalids to surmount, and I did not consider myself justified in recommending them to the notice of the profession. Happily since then his Highness the Khedive, fully appreciative of their medicinal virtues, has constructed a railway which conveys the traveller in one hour of comfortable travel from the citadel of Cairo. Hélouan stands on the desert, eighteen miles to the south of Cairo, on the slopes of the Mokkattam range of hills, two miles and a half from the Nile, and one mile and a half from the cultivated land. The hotel, which is within a stone's throw of the baths, contains forty good bed-rooms, saloon, dining and billiard-rooms, and library. The cuisine (French) I found excellent, the wines certainly good, and supplied at a more moderate price than at some other Egyptian hotels. The tariff for board, apartments, and attendance is 12*s.* per diem, with an extra charge for private rooms. On the whole it is admirably presided over at present by Mr. Lombard, by whom certain suggestions of my own have been favourably received. The other buildings of the village are mostly newly-built villas and gardens, occupied by the families of the Khedive, the pachas of his court, and Europeans. As others are in course of construction, it is probable that shortly houses and private apartments may be obtainable by those who desire greater privacy.

An abundance of pure Nile water is supplied by a steam-pumping engine, which may be said to have created in Hélouan a new "oasis of the desert."

The pleasure grounds of the hotel are tastefully laid out, and planted with sub-tropical shrubs and trees, now (mid-winter) in all their glory of leaf and flower. The view from the hotel is imposing, extending over the sloping plateau of the desert, across the cultivated valley of the Nile and its wonderful river, across what remains of ancient Memphis, and terminating in the table-land of the Libyan desert, whereon, and seemingly close to the spectator, stand the eternal Pyramids. From the flat roof of the hotel, where visitors often congregate to view the sunset and superb after-glow, eighteen pyramids can be counted. There are many places of interest within reach of Hélouan, among others, Memphis, three miles; Sakkara, with its pyramids, tombs, and serapeum, seven miles; and in the eastern range the wonderful quarries of Massara and Tourah, which supplied stones for them all.

For lovers of sport good bags of wild fowl can be obtained in the Nile neighbourhood: quails in their season; ducks, geese, and snipe at all times; pelicans, flamingoes, herons, and birds of that class, are in abundance. In the desert are antelopes, hyenas, jackals, wolves, and wild cats. For excursions into the mountains donkeys and camels can be easily procured.

Now, as regards the mineral springs, the bathing establishment is divided into two portions. The part reserved for the harem of the Khedive is fitted up with the usual oriental magnificence, and appears to be much frequented. The other half, for the general public, is divided into fourteen bath-rooms, with arrangements similar to those of German spas, and floored with Minton's tiles. The charge per bath is two francs and a half. One of the four sulphur springs is diverted to an open pool, fifty feet across, by a depth of three feet six inches, with dressing-rooms attached for the accommodation of swimmers. The temperature of the sulphur springs is 88° F. at the source, and 77° F. at the baths, which may be further heated at the pleasure of the bather by hot-water pipes.

I have found the water not so unpleasant to the taste as other sulphur waters, nor is the smell so pungent. According to an analysis made by Professor Gastenel Bey, one litre of sulphur-water contains

(a) in gas—	
Sulfhydric gas	0·044
Carbonic gas	0·120
Azotic gas (not fixed)	0·000
(b) in solid matter—	
Chloride of calcium	0·188
Chloride of magnesium	1·812
Chloride of sodium	3·212
Sulphate of lime	0·240
Carbonate of lime	0·360
Total... ...	6·040

The saline springs are situated about one mile distant; they are yet only in the form of open wells with brick in cement surroundings, and are said to resemble Pullna and Carlsbad in their properties. I have not as yet seen any analysis, but from their taste I should say they are not so strongly impregnated with saline matter, but contain evident traces of iron.

On my return to England I shall submit samples for correct analysis. The ordinary temperature of Hélouan is one and a half degrees lower than that of Cairo, and being two and a half miles from, and over 100 feet above the level of the river, enjoys an immunity from the fogs which are of frequent occurrence in that city. It therefore appears to me that Hélouan will in the future hold an important position as a sanatorium, or as a winter residence for invalids. It is preferable to Dahabeeah travelling on the Nile—and here I can speak from the experience of two seasons in Dahabeeahs—in these respects.

Communication, postal and telegraphic, is daily kept up with the outer world. Medical advice can be readily obtained from Cairo, while a resident European physician is expected shortly to be appointed by the Khedive; and it is entirely free from the many inconveniences and irritations so constantly met with on the river, which, in my opinion, go far to neutralise the fine Egyptian climate. In conclusion, Hélouan is well worthy the attention of the medical profession for the class of patients that require a course of such baths and waters, and are debarred from the use of corresponding spas nearer home by the inclement winter weather of Europe.

Cairo.

A Mirror OF HOSPITAL PRACTICE, BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tam aliorum, tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

SEAMEN'S HOSPITAL, GREENWICH.

GANGRENE OF THE LUNG IN A CASE OF LEAD-POISONING.

(Under the care of Dr. RALFE.)

FOR the notes of this case we are indebted to Dr. H. Murphy, the house-physician.

P. J——, aged twenty-eight, was admitted on Oct. 16th, 1877, suffering from lead colic, which had first attacked him whilst painting six weeks previously. The blue line was well marked on his gums. He was pallid, and looked extremely haggard and ill; stated that he had had syphilis and a severe attack of ague five years ago. Slight systolic murmur; aorta, chest-sounds otherwise normal; urine clear, acid, with one-eighth albumen. The morning after his admission, he complained of indistinctness of vision, and about 4 P.M. he became insensible, without convulsion or rigidity, and in this state remained some hours. The next day he had fully recovered consciousness, and could see distinctly. No paralysis.

Under appropriate treatment, the colicky pains disappeared, and the patient began to improve in appearance; but thirteen days after the seizure which had attacked him the day after admission he began to be troubled with cough. This continued to increase, and the following note was made on Nov. 17th:—Lower lobes of both lungs rather dull; the right, bubbling crepitation; the left, tubular breathing; and at extreme base some crepitation; expectoration dark-coloured, with fetid stench; pulse 100. Temperature: Morning, 101·4° Fahr.; evening, 104·1°. On Nov. 20th, he had some decided hæmoptysis, and exhaustion rapidly set in. He died at 1.15 A.M. the next day.

Post-mortem examination.—Pericardium contained three ounces of clear serum. Heart weighed ten and a half ounces; no valvular disease, but a few small spots of atheroma at commencement of aorta. Pleuræ firmly adherent, especially the left. Right lung weighed twenty-five ounces; very pale; posterior part of lower lobe quite solid. Left lung weighed twenty-one ounces; greater part quite solid, except apex. At the posterior and outer part, a cavity about four inches long; the outer wall formed of thickened pleura, the other wall shreddy, brownish-green, softened, and gangrenous. The dead tissue formed an isolated, abruptly limited, gangrenous patch, about the size of a walnut, separated from the surrounding pneumonia by a yellowish membranous deposit of lymph. Brain not examined.

Remarks.—Dr. Ralfe observed that the gangrene of the lung in this case was, without doubt, proximately due to embolism, and that the mischief might be dated from the day after the admission of the patient to the hospital, when he became insensible; that attack being due, no doubt, to the simultaneous plugging of one of the arteries of the brain with an embolus. The inflammation excited in the lungs by the embolus was, at first, apparently of a very mild character, for it was not till eleven days after the first appearance of lung trouble that any suspicion of gangrene existing was entertained. From this slowness of onset, and also from the fact that the man had suffered from the effects of syphilitic, malarial, and metallic poisoning, it would appear as if the gangrene in this case resulted rather from a depraved textural condition of the lung itself, which rendered it unable to resist an attack of inflammation of moderate intensity, than from the actual cutting off of the blood-supply by the embolus.

ABERDEEN ROYAL INFIRMARY.

CASE OF PSOAS ABSCESS; ANTISEPTIC TREATMENT; RECOVERY.

(Under the care of Dr. OGILVIE WILL.)

J. N——, aged fourteen, suffering from angular curvature of the spine, involving the seven lower dorsal and first lumbar vertebræ, of long duration, was admitted to the infirmary on account of a psoas abscess pointing in the left groin, of which the following is a condensed history. He stated that about six months before admission, when taking violent exercise, he "felt something give way." About a month afterwards he observed a small swelling in his groin, which gradually increased, but was unattended by pain. He applied to Dr. Garden, who aspired the swelling on three occasions, drawing off a small quantity of fluid at each tapping, but failing to perceptibly reduce its size. As aspiration was evidently insufficient, he was sent into Jacob's ward for the purpose of having the abscess opened antiseptically. At that time a large, tense, fluctuating swelling was observed on the inner side of his left thigh directly under Poupart's ligament, presenting the usual features of a psoas abscess.

On August 17th, 1877, the skin having been thoroughly purified by washing with carbolic lotion, the abscess was opened under spray, and a large quantity of pus, containing numerous flakes of curdy material, was allowed exit. Digital pressure was employed to squeeze out the remaining fluid, and several pieces of bone, evidently derived from the bodies of the affected vertebræ, were removed by passing a forefinger into the cavity. A long drainage-tube, of large calibre, was introduced, and the usual antiseptic dressings were applied, an elastic-web spica bandage holding all in position. It may be here mentioned that, had it not been for this elastic bandage, it would have been perfectly impossible to prevent the access of putrefactive elements to the wound, for the boy felt so well from beginning to end, and he was, as Mr. Glass (one of the dressers of the case) truly remarked, so "full of life," that he could not be kept still; he was so active in his movements that fifty times each day he ran the risk of displacing the dressings, but by the aid of the bandage, and a Liston splint, which it was subsequently found necessary to apply to restrain him, the danger was averted.

August 18th.—Dressings removed under spray, a small quantity of red, serous discharge staining the deep dressing. Temperature 99·4°; pulse 92. Dressing as before.

19th.—No sign of inflammation about wound. Tube filled with curdy material. A very little serous fluid obtained by pressure. Temperature 99·2°; pulse 96.

21st.—Very slight serous discharge. Curdy substance in tube. No inflammation. Temperature 98·8°; pulse 84.

23rd.—Discharge similar in character, but less in quantity. Temperature 98·6°; pulse 72.

Sept. 5th.—A smaller tube was substituted for that first inserted. From this date progress towards recovery was steady, the cavity gradually contracting, necessitating the lessening of the length and calibre of the drainage-tube from time to time; but as the notations, which were carefully taken on each occasion when the dressings were changed by Mr. Aitken, are similar to those given, repetition is uncalled for.

On Sept. 30th there was a sudden increase of discharge, the fluid being light-yellow in colour, mixed with curdy matter, but there were no signs of inflammation about the opening, no tenderness on pressure, and no putrefactive odour. At this date the temperature, which had been slightly higher than usual for some days previous, ran up to 102·4°; pulse 100. On the following day it fell to 100·9°, and the dressings were not removed. On Oct. 4th it was again normal. During the next four weeks the discharge varied in quantity, but the abscess cavity gradually became obliterated. On Nov. 5th, on the wound being exposed, after the dressings had remained unchanged for three days, only a slight stain on the gauze directly in contact with the opening was found. A very narrow drainage-tube, one inch long, was inserted with difficulty. On Nov. 12th it was shortened to half an inch; and on Nov. 17th it was removed altogether, after which the opening speedily healed, and the patient was dismissed from the hospital. He presented himself a short time afterwards in perfect health, and since his dismissal he has been disporting himself in a most active manner without showing the slightest inconvenience.

CARDIFF UNION HOSPITAL.

INTESTINAL OBSTRUCTION.

(Under the care of Dr. SHEEN.)

A. B——, aged eighteen, a pawnbroker's assistant, was admitted at noon on January 21st. He was a Jew, had a strumous look, a red-and-white complexion, and dark hair. He stated that he had not passed wind or had a motion since the 18th, that his bowels had been regular up to that time, that he had a similar attack twelve months ago which lasted two weeks, cause unknown, and that he had been subject to such seizures since childhood. Up to the 18th he was quite well, and had had his bowels moved daily and naturally. In the morning he was roused from sleep by a pain round the umbilicus, which went away in half an hour, but soon returned, and got worse towards evening, when he went to bed and took two pills, sent him by the doctor, after which he slept, and the pain was easier. A medical man saw him on the morning of the 19th, and from that time to his admission he was treated chiefly by enemata and poultices.

On admission there was uniform enlargement of the abdomen, with tympanites and pain, occasional hiccough, and an anxious expression. A turpentine stupe was applied to abdomen, and an enema of turpentine and castor oil was administered. Fifteen drops of tincture of belladonna in half an ounce of water were given every two hours.

On the 22nd the abdomen was immensely distended and tympanitic throughout. There was no relief, and the anxious look continued. He had been sick once or twice during the night, but not afterwards. The pulse was fairly good; pupils not dilated, and the throat not dry. Treatment continued. A warm-water injection to one pint was given. After 4 P.M. the bowels acted four or five times, and several

times in the night. The first set of motions were dark fluid without scybala; the night motions were formed and normal. Next morning (23rd) most of the swelling and tympanites had disappeared, though there was some amount of tenderness and dulness on the right side of the abdomen. The belladonna, which on the 22nd was given every three hours, was now given every four hours.

The bowels acted twice on the mornings of the 23rd and 24th. At the latter date all pain and swelling had gone. The patient felt quite well, and the medicine was stopped. On the 25th he was discharged well.

SUBGLENOID DISLOCATION OF THE LEFT HUMERUS OF SIX DAYS' DURATION.

E. T——, aged thirty-four, was admitted Jan. 24th, having sustained this injury six days previously. The patient was put under chloroform, which he took well, a very small quantity being needed, and reduction was easily effected by gentle extension downwards, with the heel in the axilla, the head of the bone recovering its place with a snap.

TOXTETH PARK WORKHOUSE INFIRMARY LIVERPOOL.

TWO CASES OF URETHRAL STRICTURE TREATED SUCCESSFULLY BY INTERNAL URETHOTOMY.

(Under the care of Dr. LYSTER.)

THE notes have been supplied by Dr. McDonnell, house-surgeon.

CASE 1.—Robert P——, a sailor, was admitted on the 25th August, 1877, suffering from stricture of the urethra. The patient, who was in a bad state of health, stated he had a gonorrhœa twenty years ago, for which he was treated by medicine and injections. The gonorrhœa terminated in a gleet. About ten years before admission he began to experience a difficulty in urination, which gradually got worse. On admission he had retention of urine, which was relieved by medicine and a hot bath, as a catheter could not be passed. Two abscesses formed, one in the perineum, and the other in the scrotum, both of which were opened. From that period he passed his water through the fistulæ that remained, a few drops only of urine being passed through the urethra.

On examination the stricture was found four inches down the urethra. No catheter could be passed through the stricture. On July 10th Dr. Lyster introduced with difficulty the finest filiform bougie into the bladder, and, having screwed on Maisonneuve's urethrotome, performed urethrotomy, dividing the stricture from before backwards. About half an ounce of blood was lost. A No. 10 catheter was then passed, and about a pint of urine drawn off. The catheter was retained in the bladder twenty-four hours. On every third day afterwards for a fortnight a full-sized instrument was passed. The patient left the hospital September 8th last, able to pass a full stream.

CASE 2.—T. M——, aged forty-seven, a labourer, was admitted on March 6th, 1877, complaining of great difficulty in passing water, the urine coming away in drops. His history was that he had suffered from repeated attacks of gonorrhœa and from chronic gleet, the difficulty on micturition having been first noticed after a gonorrhœa seven years before, and having of late grown much worse.

On examination two very tight strictures were discovered; one situated in the spongy portion of the urethra, an inch and a half from the meatus, the other in the membranous portion.

On the second day after admission a No. I catheter was passed with great difficulty, and on removal the instrument was found to have been tightly embraced by the anterior stricture.

On March 10th Dr. Lyster performed internal urethrotomy with Maisonneuve's urethrotome. A No. 10 catheter was then passed and left in for twenty-four hours. After the operation the patient complained of little or no pain.

On every third day afterwards a No. 10 catheter was used, and the patient was instructed to pass an instrument every fortnight after leaving hospital. He left on the 24th, quite well, and able to pass a full stream without the least difficulty.

HÔPITAL DE BICÊTRE.

FRACTURE OF THE STERNUM; COMPOUND FRACTURE OF THE RIGHT LEG; FRACTURE OF THE VERTEBRAL COLUMN; DEATH.

(Under the care of M. TERRIER.)

THE following case of fracture of the sternum is of interest from the rarity of the lesion, and also on account of the diversity of the accidents. There is a record of but a single case of fractured sternum at the Hôtel Dieu during eleven years, and Lonsdale cites one example out of 1901 cases of fracture treated in Middlesex Hospital. Of late years many observers seem to have met with it. Rollande, Cruveilhier, and Malgaigne have all given descriptions of the injury as it presented itself to their observation, but few have tried to explain the mechanism of their production. Malgaigne considers that the fractures where the two fragments are separated from one another are determined by a fall on the back, causing a forced traction on the superior and inferior extremities of the sternum, or by a violent separation of the superior and inferior ribs. When, on the contrary, the two fragments are placed one in front of the other, the fracture, according to the same author, is determined by a forced flexion of the head and the superior part of the thorax forwards. The following case, according to the information that could be obtained, would seem to support this latter theory.

Antoine B——, aged sixty-seven, a quarryman, was admitted on Jan. 9th, 1878. He was a large and powerfully-built man, and certainly appeared under his age. His health up to the time of the accident, had always been very satisfactory; he had never had any serious illness, except two attacks of pneumonia. For some months he had been suffering from a little chronic bronchitis with emphysema. He had never had syphilis, and was not given to drink. An hour before admission he was working in a stone quarry, and was occupied in mining a huge mass of earth, measuring about ten metres (about thirty-three feet) in height, when suddenly the whole mass gave way, and he was immediately buried under it. At the moment of the accident the patient seems to have been in a bent posture, because when he was extricated he was found lying on his face. This would be quite in keeping with the explanation that Malgaigne gives of the production of this variety of fracture. The man immediately became unconscious, and could not tell how long he remained in that state. His companions speedily rescued him, when it was discovered that he had lost a considerable quantity of blood by the mouth.

Upon admission he was suffering from shock, accompanied with stupor, although he was capable of answering questions when pressed to do so. With the exception of a few bruises on the face the head seemed to have escaped injury. There was no bleeding from the ears, nose, or mouth. The breathing was regular, but a little difficult—thirty to the minute. He complained of a violent pain situated in the middle of the sternal region. In the right leg there was a compound fracture of the two bones, with protrusion of the fibula to the extent of two centimetres. The articulation of the ankle was largely opened. The foot was quite cold and insensible to the touch. The cellular tissue of the inferior half of the leg was emphysematous. On inspecting the thorax it was easy to see that there was a fracture of the sternum. The superior fragment was situated much further back than the inferior one, as also the ribs that were articulated with that portion of the bone. The head had a slight tendency to fall forwards. The superior fragment was movable, and upon placing the hand on the seat of the fracture it was easy to feel the crepitation that was produced at each respiration. The shoulders were also thrown slightly backwards. The inferior fragment projected slightly outwards and covered the inferior extremity of the superior one. No irregularities could be felt at the seat of the fracture. Both clavicles maintained their proper position. There were loud sonorous râles in the lungs, but the percussion note was normal. There was no fluid in either of the pleural cavities. The heart-sounds were normal; pulse regular; temperature 36·4° Cent. (rectum).—12 o'clock: Dyspnœa. Respiration hurried and stertorous. Numerous râles in the chest. The tactile sensibility in the legs greatly diminished. Temperature 37·6° C. (99·68° F.)—4 o'clock: Dyspnœa increasing in intensity. Heart-action getting

affected; sounds feeble. Pulse very irregular; long intermittences.

The leg was put up in a Scultet's apparatus, and ice was applied to the seat of the fracture. The fracture of the sternum are also reduced without any difficulty. It sufficed to place a few cushions under the hollow of the back to throw the head and the superior part of the thorax backwards, and then to make slight traction under the armpits. The two fragments immediately came into juxta-position. The patient was left to lie with his head rather lower than his chest, in order not to disturb the fragments.

Jan. 11th. — Complete collapse. Respiration painfully slow. Pulse 120; temp. 38° C. (100·4° F.); heart-sounds very irregular, three rapid pulsations and then a pause.

12th.—Pulse extremely slow and weak; temp. 38·5° C., (101·3° F.) Died at four o'clock.

Necropsy, forty-eight hours after death.—The pericardium was distended with about 300 grammes of blood-stained fluid; ecchymosis of the external surface of pericardium; enormous hypertrophy of the left ventricle. There was a vertical fracture of the fifth dorsal vertebra, also a transverse one of the same vertebra. There was a transverse fracture of the sternum, situated on a level with the point where the third rib is articulated with the sternum. The direction of the fracture was oblique from above downwards, and from front to back, so that the lowest extremity of the superior fragment was formed by the posterior table of the bone, while the anterior table formed the tip of the inferior fragment. The inferior fragment projected forwards, and partly covered the superior one. Two centimetres of the top of the inferior fragment was broken off, forming a third fragment. The third rib on either side was separated from its sternal union. The fourth and fifth ribs on the left side were broken. The other organs were quite healthy.

Medical Societies.

PATHOLOGICAL SOCIETY OF LONDON.

Rupture of Aortic Valve—Prostatic Tumours removed in Lithotomy — Impacted Fracture of Femur — Bacillus Anthracis—Cancer of Tonsil, Pharynx, and Larynx—Thrombosis of Superior Mesenteric Artery — Spinal Caries—Sarcoma in an Infant—Congenital Occlusion of Common Bile-duct.

THE ordinary meeting of this Society was held on the 5th inst., Dr. Murchison, President, in the chair. A large number of specimens of much interest were shown.

Dr. BURNEY YEO exhibited the Heart and Aorta, from a case of Rupture of the Aortic Valve. In May, 1874, he had brought the patient, then a muscular, healthy man, forty-five years of age, before the Clinical Society, on account of a remarkably loud, deep-toned, musical murmur audible all over the chest, and with a history of having three weeks before fallen down a flight of stone steps, and been unable to save himself. Shortly after the accident the patient noticed a singing noise in his chest, which kept him awake at night. Beyond winter cough for some years, he had been healthy, but had suffered from rheumatic pains frequently. There was no pain, no faintness, and no marked dyspnœa. Two months after his first attendance the murmur altered in character; once it disappeared entirely, and after that it assumed characters of an ordinary double aortic bruit. In January, 1877, he was much worse, suffered from cough, dyspnœa, and had a staggering ataxic gait; the heart had greatly hypertrophied; the murmurs were unchanged. After three weeks' stay in King's College Hospital, deriving much benefit from the rest, he continued in much the same condition, but died suddenly on Nov. 20th. There was great hypertrophy and commencing degeneration of the heart-wall, the aorta was atheromatous, and the right anterior and posterior cusps of the aortic valve were torn from their attachment to the aorta for a distance of a quarter of an inch, the detached portions being thickened and shrunken. Dr. Yeo thought that, when recently ruptured, the detached portion of the valve must have vibrated freely in the blood-current, and have thus produced the original musical murmur; the subsequent thickening and contraction causing the change in the character of the bruit. The disappearance of the musical tone disproves the theory that it is due to the vibration of the free margins of the uninjured cusps. The duration of life in this case was notable—nearly four years; for Dr. Yeo had found in a number of cases he had collected (THE LANCET Dec. 5th, 1874) no case in which life was prolonged for more than eighteen months after the supposed date of the rupture.—Dr. POWELL asked whether the character of the pulse varied as the case progressed; for some years ago, in a case he published of aortic valvular disease due to injury, the pulse for the first year or so was of the typical aortic regurgitant character, but towards the close of the case it became irregular and of a mitral type, due probably to increasing dilatation of the ventricle.—Dr. MURCHISON thought he had read of cases in which life was prolonged to a greater period than Dr. Yeo had stated.—Mr. NUNN inquired what was the cause of death?—Dr. YEO, in reply, said the pulse was always full and collapsing. No doubt some cases do last for longer periods, but he had not found them recorded. When this case was discussed at the Clinical Society, Dr. Anstie stated that he had seen a patient in whom Dr. Walshe had diagnosed rupture of the aortic valve some years before; but the murmur had disappeared. He certified the cause of death as "rupture of the aortic valve."

Mr. BRYANT showed two specimens of Prostatic Tumours removed in Lithotomy. The first case was that of a man sixty-seven years of age, in whom lithotomy was performed in January, 1875, symptoms having existed for fifteen months. The blunt gorget was used, and some resistance was felt in the extraction of the calculus. This was due to a tumour of the third lobe of the prostate, which was removed with the stone. The latter was a mulberry calculus, an inch and a half in diameter, with lithic-acid deposit outside. The case did very well; urine passed per urethram on the sixth day; and in March the patient left the hospital quite well. He was seen again in May, and as late as Oct. 1877; he was still in good health, and had no return of bladder symptoms. The second case was that of a clergyman seventy years of age, seen by Mr. Bryant in February, 1876. He had suffered from bladder symptoms for four years; for two years the urine contained blood; and for six months micturition had been very frequent, and prolapse of the rectum had occurred. The presence of a calculus being ascertained, Mr. Bryant performed lithotomy, and in consequence of enlargement of the prostate found a difficulty in reaching the bladder. Similar difficulty in extraction of the stone occurred as in the previous case; and here, again, a portion of the prostate gland was found to be included with the calculus between the blades of the forceps. The tumour was readily enucleated by rotating the forceps, and withdrawn with the stone; no bleeding followed. By the twenty-second day urine passed wholly through the urethra, and in six weeks the perineal wound healed, all bladder symptoms had disappeared, and the patient was now quite well. The stone was composed of uric acid, with phosphates and oxalates. The tumour in each case was composed of well-marked glandular tissue and muscular fibres; and the second specimen was in parts so highly cellular as to lead Dr. Goodhart, who examined it, to think it was in an actively growing condition. Mr. Bryant remarked on the great and lasting relief obtained in both cases, not only from the calculus, but from the removal of the tumour; so much relief that he would suggest that surgeons in performing lithotomy on the aged should remove any prostatic tumour that might also be present; and the cases even showed that cystotomy might sometimes be performed in cases simply of enlarged prostate. In 1848 Sir William Fergusson had shown similar specimens of prostatic tumours removed by lithotomy at the Society. Mr. Bryant also showed a specimen of Impacted Fracture of the Shaft of the Femur, from a man eighty-three years of age, who had fallen down some area steps, and fractured the lower third of the right thigh. It was found impossible to fully extend the limb. Death occurred from uræmia due to suppurative nephritis on the twenty-fifth day after admission. The fracture was found at the junction of the lower and middle thirds of the femur, the upper fragment being drawn for a distance of an inch and a half into the lower portion, which was split down to the condyles. This very rare condition could only

be produced by direct violence on the distal end of the bone. It explained the failure to obtain extension, and pointed to the danger that might have arisen had attempts been made to forcibly separate the fragments.

Dr. J. C. EWART exhibited living specimens of the Bacillus Anthracis, the organism which produces splenic fever. When some of the spores of this organism are introduced under the skin of a mouse, it rapidly develops in the blood into rod-shaped particles, which accumulate in the capillaries and small bloodvessels so as completely to plug them, and to cause death from asphyxia within two days of the inoculation. If now a drop of blood containing these organisms be placed in aqueous humour and kept on the warm stage, the further development of the organism is seen. The rods lengthen out, so that in twenty-four hours they attain 120 times their previous length; and in another twenty-four hours minute dots can be seen at intervals along the filaments. These specks increase in size, and become clear, shining particles—the spores of the bacillus,—and these are set free by the rupture of the tube containing them. If some of the spores thus "cultivated" be introduced beneath the skin of another mouse the disease is reproduced, and the development of the bacillus again takes place.—The PRESIDENT inquired whether the disease was still produced after repeated "cultivations" in the aqueous humour.—Dr. EWART replied that he had obtained the result after as many as three such cultivations. The mouse died before the organism developed into the spore-bearing stage, the rod-shaped particles occluding the vessels. In reply to Sir Joseph Fayrer, Dr. Ewart said that the specimen he had used was some dried blood from a sheep the subject of splenic fever, and was sent from Germany.

Mr. LENNOX BROWNE exhibited four specimens, illustrated by drawings and microscopic preparations of—1. Primary Cancer of the Tonsil. 2. Cancer of the Tongue invading the Tonsil (living patient). 3. Pharyngo-laryngeal Cancer (living patient). 4. Primary Cancer of the Larynx. He stated that cancer of the tonsil was of extreme rarity, only one case having been brought before the Society; in that instance the disease had been discovered only after death following an operation for removal of enlarged cervical glands; and the disease was hardly mentioned in standard works on Pathology or Surgery. He had in the last eleven years seen six cases of primary cancer of the tonsil, which number, on a low computation, gave an average of one case to about every 5000 patients suffering from throat diseases. The variety of cancer in this region had been generally stated to be that of scirrhus, but his own experience had lately led him to believe that it was more frequently encephaloid. All his cases had occurred in male patients between forty and sixty years of age. The patient from whom the first specimen was taken was a man aged fifty-three, and was under observation from Sept. 17th to Dec. 24th, 1877, the day on which he died. His case well illustrated the ordinary signs, symptoms, and course of the disease—namely, gradually increasing swelling of the affected tonsil and faucial tissues around, with corresponding infiltration and hypertrophy of the submaxillary and cervical glands, extreme dysphagia with constant earache, both relieved on occurrence of ulceration, and by hæmorrhages, which are so frequent, and which, as in this case, usually lead to death. Emaciation is also very rapid. This patient lost twenty-six pounds in ninety-eight days, and seven pounds in the last fourteen days of his life. Relief had been given by removal, on two occasions, of portions of the tumour by the galvano-cautery loop, and this was the only surgical treatment which could be safely recommended. The second case was even still more rare, and was the first he had seen, although he had since learned that his colleague, Dr. Llewelyn Thomas, who kindly transferred this patient to his care, had witnessed another similar to it. It was by no means infrequent for the pharynx and floor of the mouth to be invaded by contiguity of epitheliomatous ulceration, but in this instance the disease was actually of the tonsil itself. The patient had suffered from one or two attacks of severe hæmorrhage, and the termination of the case would probably be the same as in that of the former specimen. The only difference, clinically, was the greater unintelligibility of speech due to the lingual disease. The third and fourth specimens were shown in connexion with each other to illustrate the two most usual varieties of cancer of the larynx. In the living specimen it was seen on admission to commence on the pharyngeal border of the larynx, and so to press on the right arytenoid cartilage, the action of which was somewhat paralysed, and against the cricoid. The disease had now extended right across the back wall of the larynx, concealing its posterior border, and greatly diminishing the orifice of the gullet. Later the cartilages would probably undergo carious degeneration. In these cases the disease was almost invariably epithelioma; there might be only slight laryngeal symptoms, but dysphagia would be chiefly complained of, and death would be by starvation. In the other case, the disease had commenced actually in the cavity of the larynx, and was of much rarity. Here dysphagia was by no means extreme, and on post-mortem examination, the body of this patient was seen to be covered by a good layer of fat, but the laryngeal symptoms were most severe. In conclusion, it was submitted that both these cases illustrated how difficult it would be by any radical operation to remove all the disease in this region, and, even if the patient survived its immediate effects, how slight was the chance of ameliorating the symptoms or of preventing recurrence.—Dr. MURCHISON asked whether the cancer of the tonsil had been examined microscopically. Not long ago he had been present at a consultation, in a case of ulceration of the tonsil, with Sir James Paget, Mr. Prescott Hewett, and Mr. Cæsar Hawkins, in which much difference of opinion existed as to whether the case was one of cancer or syphilis. The patient improved under iodide, but died of erysipelas.—Mr. BROWNE said the specimen had the character of carcinoma. He would like to have it referred to the Morbid Growths Committee. The infiltration of the tissues around the tonsil, the great pain in the uvula, were points in favour of cancer.—Mr. BUTLIN had recently examined a specimen of primary lympho-sarcoma of the tonsil. It occurred in a stout, well-made man, forty-five to fifty years of age, who came under Mr. Smith's care at St. Bartholomew's Hospital, with a tumour of the right tonsil, the size of a racket-ball. There was no lymphatic infiltration. Mr. Smith removed the growth by the écraseur in May, and in August the man reappeared with a recurrence of the tumour. This was removed; no hæmorrhage followed, but the cervical glands were now infiltrated, and the patient has not since been heard of.

Mr. NUNN related briefly the sequel to a case of Recurrent Sarcoma, which he had brought before the Society eleven years ago. The primary growth was connected with the shoulder, and the Morbid Growths Committee reported that it showed some anatomical affinities to cancer. On its recurrence Mr. Nunn again excised it, taking every precaution to remove the whole growth. He saw the patient the other day. He is now seventy-seven years of age, and has had no return of his disease.

Mr. HOWSE showed a recent specimen of Ulceration of the Intestine, with Plugging of the Superior Mesenteric Artery. The patient, a female, was admitted into Guy's Hospital on Jan. 16th, with gangrene of the right leg, and a history of diarrhœa of six months' duration. The gangrene of the leg began about a month before admission. Mr. Howse amputated the thigh through the middle third, with great relief to the patient, who, however, sank six days afterwards. The right femoral artery was found to be plugged as high as the external iliac, and also the superior mesenteric artery, which was blocked by firm clot from its origin. The intestines, large and small, were extensively ulcerated and sloughing; perforation existing between adherent walls of colon and ileum. Besides the recent ulceration, some pigmented cicatricial patches in the colon were evidence of previous ulceration, which Dr. Goodhart had suggested had given rise to thrombosis in the mesenteric arteries, and that to secondary sloughing of the small intestine. Mr. Howse suggested that the plugging of the superior mesenteric and that of the external iliac arteries were possibly coincident events, induced by the lowered condition of the patient suffering from prolonged diarrhœa. In reply to Dr. Murchison, he added that there was evidently old as well as recent disease in the intestine, and the former probably led to the thrombosis.—Dr. LEGG inquired as to the state of the heart or the upper part of the aorta; or whether there was any hæmorrhage from the bowel, a symptom of considerable importance in plugging of the mesenteric arteries.—Dr. COUPLAND suggested that the plugging of the femoral was due to embolism from detachment of a portion of the clot in the mouth of the superior mesenteric artery.—Mr. HOWSE thought this feasible, as certainly the plug in the mesenteric artery depended into the aorta, but he had not yet made out any evidence of embolic clot in the femoral. Nor (in reply to

Dr. Murchison) were there any embolic deposits in spleen or kidney. The heart and other viscera were healthy. There was no lardaceous disease. There was a history of hæmorrhage from the bowel.

Mr. BARKER showed a recent specimen of extensive Caries of the Spine. The patient had a large lumbar abscess; another in front of the dorsal spine and the pillars of the diaphragm; a double psoas abscess; and, lastly, an abscess in front of the sacrum, which discharged externally. There was also double pleurisy, the right pleura containing turbid serum. Nearly all the dorsal, all the lumbar, and the upper sacral vertebræ were carious, the disease being most advanced in the fourth and fifth lumbar vertebræ. There was extensive lardaceous disease.

Mr. WALSHAM exhibited, for Dr. Marshall of Nottingham, a recent specimen of Sarcoma of the Leg from an infant five months old. The tumour, which was spindle-celled, and was seated in the muscles of the leg, was noticed shortly after birth; it enlarged until the leg became twice the size of its fellow. After exploratory puncture, Dr. Marshall amputated at the knee.

Mr. MORGAN related a case of Congenital Obstruction of the Common Bile-duct. The child was a male; there was no umbilical hæmorrhage; jaundice commenced ten days after birth, and increased in intensity; no bile passing in the fæces. When seven weeks old a subcutaneous hæmorrhage occurred on the outer side of right knee, and two days later another below the skin of the right forearm; two small spots of hæmorrhage were also met with on surface of tongue. The child died in convulsions when nine weeks and a half old, and Mr. Morgan found all the organs intensely bile-stained; the gall-bladder reduced to the size of a pea, and containing only mucus; the cystic and hepatic ducts empty and patent, but the common bile-duct converted into an impervious fibrous cord. A similar case is related by Dr. Legg in vol. xxvii. of the Transactions.

The Society then adjourned.

MEDICAL SOCIETY OF LONDON.

Stimulants in Typhoid Fever.—Nervous Lesions in Congenital Syphilis.

AT the ordinary meeting of this Society on the 28th ult., Dr. G. Buchanan, President, in the chair, Dr. LEARED read notes of a case of typhoid fever, in which active stimulant treatment was pursued when the patient had been much reduced by profuse hæmorrhage, and apparently on the point of death. Dr. Leared maintained that, in this case, the free exhibition of alcohol had saved the patient's life.—Dr. ROGERS, who has recently given up stimulation in typhoid fever, had occasionally recurred to it, and with the best results.—Mr. BLOXAM asked whether any reduction of temperature was produced by the alcohol, and whether equally good effects might not have been produced by the administration of quinine in large doses?—Dr. SEMPLE occasionally gave stimulants in typhoid with admirable results.—Mr. ROYES BELL cited his personal experience of the efficacy of free stimulation, in a severe illness caused by a poisoned wound followed by scarlet fever.—Dr. WILTSHIRE said the question before the Society was not the giving of alcohol always in typhoid fever, nor in always withholding it; but whether it was not at times the only means, as in Dr. Leared's case, to save the patient's life. There was no doubt, however, that under certain conditions alcohol was not absolutely necessary.—Dr. EDMUNDS never gave alcohol at all, and he doubted even in the present case whether the benefit derived was due to it.—Dr. LEARED said the maximum temperature was 103°F., and it rapidly fell when the alcohol was pushed. Brandy and wine were to be preferred as stimulants to ammonia, and in typhoid they were indicated by failure of the pulse, feebleness, or inaudibility of cardiac sounds—an indication upon which the late Dr. Stokes laid much stress.

Dr. DOWSE read a paper on Hereditary Syphilis as it affects the Brain and Nervous System. He commented on the fact that the occurrence of changes in the nerve-centres in congenital syphilis was only recently recognised, and stated at length his reasons for believing that many cases of so-called scrofulous disease were really the outcome of inherited syphilis. After referring to Dr. Barlow's case of gummata in cranial nerves related in the last volume of the Pathological Society's Transactions, Dr. Dowse gave details of a similar case that had fallen under his own observation. The patient was a fairly well-nourished girl twelve years of age, admitted into the Central London Sick Asylum in November, 1874. She was one of four living children, none of whom were healthy. There was a history of syphilis on the father's side, and the mother, who had had several miscarriages, and three of whose children had died in infancy, was said to have died of phthisis. The child herself was healthy till five years of age, when she had ophthalmia and ozæna, and in 1872 she had a fit, and was unconscious for four hours. Then followed an eruption of a tubercular syphilide, commencing at the side of the nose and rapidly ulcerating; the tip of the nose was destroyed before the ulceration healed. Nervous symptoms then became prominent, commencing with headache, followed by epileptiform attacks, diplopia, and swelling of the optic discs. As to the cranial nerves, there was loss of smell, anæsthesia of left half of face, and paralysis of the right sixth and left seventh facial nerves; the third and fourth pair were not involved. Death occurred finally after a number of epileptic attacks, in which the right side was slightly more involved than the left. Towards the close of life she became aphasic, and there was some paralysis of the right arm. Adhesions existed between the dura mater and the surface of the brain in the parietal regions, and gummatous growths were found on the upper part of the superior parietal lobule, and on the left side on the posterior parietal lobule and the supra-marginal gyrus. The arteries at the base of the brain presented endarteritic changes, as described by Huebner, and the left fifth and seventh nerves were thickened, swollen, of a deep pink colour, and a toughened gelatinous character. The liver and kidneys were lardaceous. Two other cases were related in the paper, which was a lengthy one.

Reviews and Notices of Books.

Diseases of the Kidney and Urinary Derangements. By W. HOWSHIP DICKINSON, M.D. Cantab. Part II.: Albuminuria. London: Longmans. 1867.

DR. DICKINSON'S treatise on Albuminuria, having long been out of print, has been rewritten as the second part of his work on Diseases of the Kidney. Its author is well known as an indefatigable worker, and the volume before us fully sustains his reputation. As a record of a large amount of careful clinical and pathological observation, it will possess a lasting value, even although theory and practice should change. The work aims at being a complete treatise on those forms of kidney affection which are comprehended under the term "Bright's disease"—their pathology, symptoms, and treatment. It is founded on Dr. Dickinson's well-known views; and the basis of the work is the author's own experience. The opinions of other authorities are, indeed, with regard to some subjects, rather too lightly touched upon—sometimes, in fact, unmentioned. The book is admirably illustrated with woodcuts and lithographic and chromo-lithographic plates.

A work going over ground of which there is little that has not been before explored and made known by the author himself or by others, and so carefully surveyed as in this treatise, offers little occasion for detailed critical review. We shall therefore content ourselves with an outline of its plan, noting here and there a few points which call for special remark.

The first chapter is on the "post-mortem state of the healthy kidney," by which is meant the microscopical condition of the organ when other evidence of disease is not present. A careful examination shows that the conditions of the renal epithelium commonly relied on as evidence of disease are often present as the result of general morbid states, without albumen in the urine. A marked granular condition was found in nearly half the cases, in some so considerable as to hide the nucleus.

We confess that it seems hardly fair to regard such kidneys as "healthy" because there was no albumen in the urine nor any marked alteration in their coarser characters, any more than it would be to call the granular heart-fibres in fever those of a healthy organ. The information contained in this chapter is, however, of considerable value.

Having explained the classification of the kidney changes attended with albuminuria as tubal, intertubal, and vascular, Dr. Dickinson considers, in the second chapter, the significance of albumen and casts in the urine, and in the third the pathology of tubal and diffuse nephritis. These two conditions are described together, because, although the former predominates in the early and the latter in the later stage of acute Bright's disease, as in other conditions, the two cannot be practically separated, but pass into one another by imperceptible grades. Recent observation has, indeed, shown the occurrence of an earlier interstitial stage than was formerly imagined. The clinical history of this condition is next described; causes, symptoms, causes of death, and urine; followed by illustrative cases and by a more detailed description of the causes of nephritis—cold, scarlatina, artificial irritants. In the chapter on the treatment of nephritis, the principles laid down are the avoidance of irritating drugs, and the injection of large quantities of water "to wash out the disturbed and accumulating cells." The author looks with suspicion on diuretics, even on digitalis, and states that in children, when the kidney responds readily, "the disease will often recover without further treatment." But what is the effect of the water treatment on the dropsy if the kidney does not respond readily?

In the seventh chapter the pathological anatomy of the granular kidney is described, and this is, it is hardly necessary to say, referred to intertubal change. In the chapter on etiology a remarkable instance of heredity is narrated, in which extreme proneness to albuminuria was traced through three generations. The effect on the heart of granular disease of the kidneys is, Dr. Dickinson thinks, understated rather than overstated in current statistics on the subject. He found an analysis of 250 cases of granular degeneration, from the books of St. George's, gave 48 per cent. as the proportion of cardiac enlargement; but since his attention has been directed to the subject, he has, he states, scarcely seen an instance of renal disease in which some degree of cardiac hypertrophy could not be recognised. The chemical changes in the urine are very minutely described. Several cases, carefully narrated, exemplify one of the less common symptoms of albuminuria, spasmodic dyspnœa. The explanation of this to which Dr. Dickinson evidently leans is that which ascribes it to spasm of the pulmonary arteries, on account of the intermitting character of the dyspnœa and the cardiac type of the symptoms.

In the chapter on the treatment of granular kidneys, the most important practical points which are not current are the limitation of nitrogenous food, in order to lessen as far as possible the formation of urea, and the observation, which certainly will occasion some surprise, that there is a smaller tendency to anæmia in this than in other forms of kidney disease, and that, therefore, exhausting treatment is well borne.

The chapter on lardaceous disease of the kidneys commences with an outline of the general pathology of the lardaceous change. In the kidney the change, being vascular, is intertubal, and seems to act as an irritant and give rise to other intertubal changes—fibrosis and contraction; and it is to this rather than to the simple lardaceous change that the effects on the heart and circulation sometimes observed are due. A careful account is given of the symptoms and characters of the urine in cases of lardaceous kidneys. Led by his theories of the nature of the change, Dr. Dickinson has tried potash largely, and thinks it does good in conjunction with tonics, but admits that when given without tonics the results of its use are disappointing.

A special chapter is devoted to the condition of the heart and arteries in chronic renal disease. From the extent of his researches into the pathological anatomy of renal disease, Dr. Dickinson's unbiased opinion is of much interest. He entirely agrees with Dr. Johnson regarding the fact of the hypertrophy of the arterial coats, and gives numerous figures of the change; but he does not accept Dr. Johnson's "stopcock" view of the mechanism of its production. The view, however, which Dr. Dickinson advances in explanation of the phenomenon, as if it were original, is no other than that which Dr. Johnson advocated in the paper in which, in 1850 (and not, as Dr. Dickinson states, in his later paper in 1867), he first pointed out the fact of the arterial change: the theory that the arterioles, like the heart, hypertrophy to overcome a capillary obstruction. Dr. Johnson abandoned this explanation when the theory that arterial contraction forced on the blood disappeared from physiology, and he must certainly be surprised to find it reappear under its present auspices.

An interesting chapter towards the close of the work treats of the alterations in the blood-corpuscles in albuminuria. Dr. Dickinson has counted the corpuscles in various forms of kidney disease, and finds that, taking 5,000,000 per cubic millimetre as the standard, the red corpuscles in nephritis averaged 3,921,875, with a minimum of 2,949,250; while the white were increased. With the granular kidney the average of red was reduced to 3,231,625, and the minimum to 2,729,625, the lowest point in the entire series, a fact which it is not easy to reconcile with the statement to which we have referred, that the tendency to anæmia is less in this than in other forms.

Effets Physiologiques et Applications Thérapeutiques de l'Air Comprimé. Par le Dr. J. A. FONTAINE. Baillière. 1877.

THAT variations in the pressure of the air to which the body is exposed should exert a powerful influence on the nutritive functions is not surprising when we reflect how serious are the consequences of sudden changes of that pressure, as exemplified in the records of Glaisher's balloon experiments, in the daily experience of those engaged in deep-sea fishing of the effects of rapidly drawing up to the surface a fish naturally living at a great depth, and in the account given some years ago, by the surgeon in charge of the operations connected with the laying of the foundation of the piers of the St. Louis bridge, of the action on the workmen of exposure to the increased pressure of the air resulting from the weight of a column of water of about 80 feet in height, or nearly three atmospheres. Dr. Fontaine describes the different apparatus by means of which the body can be exposed to considerable variations in temperature, as the diving-bell, the scaphandre, the nautilus caissons, &c. He refers to and quotes Paul Bert's experiments, which show that in 1000 volumes of blood there are normally contained 200 of oxygen, 400 of nitrogen, and 22 of carbonic acid gas. When the pressure diminishes, the quantities of O and CO_2 contained in the blood diminish equally; increase of pressure causes but little increase of the amount of oxygen taken up. The increase is greatest when the pressure amounts to one or two atmospheres, but the blood of some animals (dogs) possess more oxygen naturally than others will take up when exposed to ten atmospheres. M. Fontaine then proceeds to describe the effects of diminished atmospheric pressure on the respiratory and circulatory acts, both of which are increased in frequency, and on those of nutrition, which it reduces, as shown by the amount of urea eliminated. The mal de montagnes, the mal des aerostats of lofty mountains are then passed in review. The physiological effects of

exposure to air compressed to the extent of from two to six atmospheres are then considered, as the pain in the ears, the diminution in the frequency of respiration, the increased amplitude of the acts, and the prolongation of the expiration, the increase in the activity of the nutritive processes and of the secretions of urine and saliva. The chief accidents observed from too sudden return to normal pressure are stated to be visceral congestions, hæmorrhages, and paralyses.

The physiological effects of an ordinary bath of compressed air, which is now given at a pressure of from one to ten atmospheres (the sitting being maintained for two hours and the pressure slowly increased and diminished), are said to be the following: (1) Augmentation in the amplitude of the inspirations; (2) diminution in the number of respirations in a given time; (3) prolongation of the expiratory act, and (4) as the result of repeated sittings, augmentation of the capacity of the lungs; (5) superoxygenation of the blood, increased activity of the organic combustion, and elevation of temperature. The affections in which it has been tried are asthma, pulmonary emphysema, whooping-cough, phthisis, coryza, angina and chronic laryngitis, chlorosis and anæmia, diabetes, albuminuria, gout, various forms of cachexia, nervous cough, thoracic deformities. The cases are too few to permit of any positive deductions being drawn, but in some the results appear to be very striking, especially in those of asthma and in the earlier stages of phthisis.

OUR LIBRARY TABLE.

The Birmingham Medical Review. No. XXV. (New Series, No. I.) January, 1878. Birmingham: White and Pike. — Undaunted by the lamented demise of the *British and Foreign Medico-Chirurgical Review*, this quarterly journal appears to have made a fresh start in life; and we may congratulate its promoters on its very creditable appearance. The plan of the journal consists in reviews and notices of books, original communications, reports of cases, and medical news. Under the first head we have some good pathological work in the articles "What is Tubercle?" and the "Pathology of Dropsy." The writer of the first of these gives no very decided answer to the question propounded, but he has evidently a bias in favour of limiting the term "tubercle" to the grey granulation—albeit admitting that even that limitation sometimes involves too much. He does good service, however, in pointing out the modifications of tubercle according to its situation, and is not sparing in his criticism of those who hanker after the proof of specific cell-elements to establish the tubercular nature of a growth. There is an excellent article on the "Treatment of Simple Ulcer of the Stomach," based chiefly upon recent German writings on the subject. Indeed, throughout, we are glad to observe the writers able and willing to make themselves acquainted with the most recent researches on the subjects on which they write. The critical notices of books are impartially written. Dr. Russell's paper on the "Use of Alcohol in the Treatment of Disease," and Dr. Saundby's "Hints on Morbid Histology," may be singled out as excellent in their way.

Medicinal Plants. Parts XV. to XXV. By ROBERT BENTLEY, F.L.S., and HENRY TRIMEN, M.B., F.L.S. London: J. & A. Churchill.—It is more than twelve months since we last noticed this interesting publication, and the appearance of its twenty-fifth number shows no slackening in the care bestowed by authors and artist. The plates are as well drawn, and the descriptions even more carefully compiled, than in the earlier issues of the work. It is not possible to signalise any particular portions as preferable to others; but we must again direct attention to the fact that several plants are here figured and described for the first time, many the medicinal properties of which are perhaps not sufficiently recognised in this country,—we allude to many American and Indian plants, which have been so ably reproduced from the dried specimens contained in the British and Kew Museums. The last number that has reached us—the twenty-fifth—contains the Hydrastis Canadensis, and Coptis trifolia (or "Gold-thread"—a bitter tonic), belonging to the Ranunculaceæ; the Berberis aristata, to the Berberideæ; the Abrus precatorius, or Indian liquorice, and Cassia fistula, to the Leguminosæ; Alstonia scholaris, to the Apocyniæ; and Calotropis procera, to the Asclepiadaceæ. It is interesting to note that only one of these plants appears in the British Pharmacopœia, although several possess properties highly valued by those countries in which they are officinal.

On the Occurrence of Oxalic Acid in Fungi. By W. M. HAMLET, F.C.S., and C. B. PLOWMAN, M.R.C.S. (Reprinted from the *Chemical News.*) 1877.—The authors have examined quantitatively twenty-six specimens of different species of non-microscopic fungi, and discovered in them all the presence either of free oxalic acid or oxalates. In addition, they have given a complete analysis of F. hepatica. Although much has been done of late upon the composition of fungi, yet it has chiefly been confined to their ultimate analysis, or to the analysis of the ash; these notes therefore, which bear upon their proximate composition, are of considerable interest, and will be useful to future workers in vegetable physiology.

The Gaceta Médica de Cataluña. Edited by Dr. CONSTANTI and others. Vol. I., No. 2, Jan. 20th, 1878, contains—(1) a review of recent work on the Sense of Colour, by Dr. R. Mendez; Investigations on Laryngeal Tuberculosis, by Dr. P. Esquerdo; (3) Cases of Compound Fracture, which have occurred in the hospital of Santa Cruz; and (4) a lecture on Cod-liver Oil, by Dr. Narciso Carbo y Aloy, who gives the following formula as being well adapted to conceal the flavour of cod-liver oil: Syrup of orange-peel and aniseed water, of each thirty grammes; essence of the calamus aromaticus, three drops. He recommends its outward use in the form of infriction.

GOLDEN SQUARE HOSPITAL.

WE have been requested to publish the following as a copy of a requisition which has been addressed to the secretary of this hospital.

"We, the undersigned subscribers to the Hospital for Diseases of the Throat, 32, Golden-square, London, W., in accordance with bye-law 38, do hereby request you to convene a special general meeting of subscribers. The objects for which we require such meeting to be held are as follows:—1. "To receive a letter from Sir Dighton Probyn, enclosing, by permission of His Royal Highness the Prince of Wales, the report of the committee of inquiry, held on the 14th of July last, at the request of His Royal Highness, into the alleged mismanagement of the medical department of the hospital. 2. To receive the report of the committee of inquiry above mentioned, which, it appears, has resulted in the withdrawal of the patronage of their Royal Highnesses the Prince and Princess of Wales, and in the resignation of the Marquis of Bute, the President of the institution. 3. To take such steps as may be necessary to re-organise the hospital, so as to justify the renewal, if possible, of their Royal Highness's countenance and support."

Signed by—The Marquis of Hamilton (vice-president), the Earl of Pembroke (do.); the Earl of Ilchester (do.); Earl Cowper (president 1874-5); the Earl of Rosebery; Lieut.-Colonel Lord Eustace Cecil, M.P.; the Hon. Wilbraham Egerton, M.P.; Sir Charles Legard, Bt. M.P.; Sir Louis Mallett, C.B.; Colonel William Pinney (vice-president); Captain Hughes Hallett (vice-president); H. B. Mildmay, Esq.; F. R. Wegg-Prosser, Esq., and others.

THE LANCET.

LONDON: SATURDAY, FEBRUARY 9, 1878.

THE President of the Local Government Board has brought in his Bill, and its general provisions, so far as they affect the questions in which we are immediately interested, may be briefly summarised as follows. Courts of Quarter Session, when not engaged in judicial business, will be constituted as "County Boards"; two justices chosen by the justices of the county in Quarter Sessions assembled will sit as representatives of the local interests of each petty sessional division of the county, which will be still more directly represented by two "elective" members who will be elected by the "elective" guardians of the parishes situate in the petty sessional division. This is the principle of the constitution which it is proposed to give the new County Boards, and it would be difficult to see how any serious objection could be taken to the scheme on the ground of insufficient representation. The tenure of office, both in the case of justices and "elective" guardians, is to be limited to one year. The old powers of the justices of the peace, so far as administration of county business is concerned, will be inherited by the County Boards, and certain new powers will be added. With those relating to the management of roads and highways we have no special concern. Section 22 constitutes the board a sanitary authority within the meaning of the Rivers Pollution Act, 1876, and arms it with power to enforce the provisions of that neglected statute, in the case of any stream passing through or by any part of the county. The County Board may, under a provisional order issued by the Local Government Board, assume the conservancy of any river or part of a river situate in the district, and carry out any scheme for improvement approved by the central authority. The County Boards will also have power to erect asylums and establish schools for the imbecile and idiots and for those of the insane poor who "may lawfully be detained in a workhouse."

We regret the perpetuation of this unintelligible definition. It has never yet been made clear to practical men how the implied classification is to be carried out. At the present moment a warm dispute is in progress between the managers of one asylum for imbeciles and the boards of guardians who insist on their supposed and assumed right to treat the asylum as a refuge for troublesome, and even dying paupers. The managers of the asylum go so far as to allege that the guardians who exercise this right ought to be held answerable for the consequences. Something like an abuse of the law of inquest is being perpetrated to prove the point, and it is difficult to condemn the recourse to this irregular method of trying the question seeing that no more reasonable mode of adjustment is open to the managers. Meanwhile it would be a grave error to create new difficulties, instead of embracing the opportunity which this Bill offers for the removal of those that exist. We do not exaggerate the perplexity when we assert that no one, as matters now stand, can guess what is meant by "insane poor who may lawfully be detained in a workhouse."

In practice there is a total want of consistency between the description officially given to justify the removal of an inmate from a workhouse to an asylum for imbeciles, and the report required to make out a claim to detain the patient after transfer. More than mere verbal discrepancy is involved in the disagreement, and the position occupied by the managers of these special institutions is not less unsatisfactory in its relations with the Board of Commissioners in Lunacy than it is equivocal, if not untenable, in regard to the inmates. In truth the measure devised by Mr. HARDY underwent considerable alteration in its passage through Parliament, and reached the statute-book in a condition which has proved defective and even contradictory. We would strongly urge that in extending the principle of that Act to the counties generally, Mr. SCLATER-BOOTH should, by implication, define what is unintelligible in the existing law, and thus put an end to a conflict which is straining the authority of a useful Act, and giving rise to great practical difficulty. The question to be answered lies in a nutshell—Are these asylums for imbeciles to be establishments for the relief of the workhouses or of the asylums? Are they for aged and troublesome paupers, or chronic and incurable lunatics? At present inaccurate and contradictory classifications are adopted to qualify the persons lodged in them for admission and for detention. Before the number of these anomalous institutions is multiplied indefinitely, their purpose should be more distinctly defined.

The County Government Bill, it will be seen, deals with matters of the highest public interest. The proposal to create county boards is one of long-standing importance. The introduction of the provision to which we have just alluded is probably due to the energy displayed by a committee of the Charity Organisation Society which waited on Mr. SCLATER-BOOTH last year to point out the need of extending the benefits conferred on the metropolis by Mr. HARDY'S Act to the country. We expressed regret at the time, and we still deplore the circumstance, that this committee did not grapple with the practical difficulties of the asylum system, both as regards imbeciles and idiots. The latter, as we have repeatedly urged, should be retained in special institutions until their dormant powers are developed, instead of being removed at the age of sixteen; when, as a matter of fact, the stage of mental growth may be correspondent to the normal age of six, and the mind, perhaps, opening with good promise when the road to improvement is suddenly stopped. This again is a matter of classification, and can be readily met by a defining clause incorporated with the Bill now before Parliament.

Meanwhile the provision which will probably strike the public mind as of pre-eminent importance is that which relates to the appointment of coroners. If this measure becomes law, these officials will no longer be elected by the freeholders, but chosen by the County Boards, or, failing their action, appointed by the Lord Chancellor. This is a proposal of serious moment, and should be discussed in all its bearings. At the first blush of the scheme, there is the obvious objection that the individual selected for office will assuredly be chosen for qualities agreeable to the County Board, notably that of pliability in the matter of *expenses!* We know how

severely the costs incurred by coroners acting under the Middlesex board of magistrates are criticised; how one is pitted against the other in the competition of cheapness. This sort of thing must be expected to go on all over the country when the Bill becomes law. Coroners will be chosen who discourage post-mortem examinations, and their expenses will be scrutinised with all the eagerness of which a local administrative authority is capable, intensified by the knowledge that the officer owes his position to the board which controls him. We are not prepared to say that this objection is fatal to the scheme, but the Bill as it stands requires a safeguard. That may, perhaps, be secured by embodying in Section 26 a provision that coroners appointed under this Act shall be paid by salary, and that their expenses shall be defrayed out of the Consolidated Fund. Just as there is an allowance per head for lunatics maintained in asylums, let there be an allowance for inquests, the *record* in each case being sent up to the Central Criminal Court, and the charges taxed or disallowed when this is defective. This would be only one additional step on the lines already laid down for the relief of local taxation, and would be welcomed by the ratepayers at the same time that it cut the Gordian knot of a serious difficulty. The appointment and stipend of the coroner would remain under the control of the County Board, while of the duty of criticising and the obligation of defraying, the costs of inquests, the local body would be relieved. We throw out the suggestion, and trust it will be considered while the Bill is in Committee.

It is only possible as yet to pronounce a tentative judgment on the measure as a whole. That the scheme it propounds may be developed into a sound measure of reform there can be no question. Meanwhile the details must be rigorously examined, and the scrutiny will need time. That the President of the Local Government Board has exhibited considerable courage and, as we believe, political wisdom, in bringing in the Bill at this conjuncture, is obvious. The plain duty of all interested in the matter will be to aid, instead of embarrassing, the task of shaping the measure to a practical and adequate solution of the complex problem with which it deals.

THE influence of the nervous system on nutrition is one of the subjects to which much attention has of late been paid, but of which we know comparatively little. The fact that various disturbances and anomalies of nutrition and growth do occur in connexion with nerve disease and injury is well established, but there are many explanations of the way in which these changes are brought about. Some of these are no doubt true, and all are possibly applicable in certain cases. The older observations had reference chiefly to the results of division either of mixed or of sensory nerves, such as the rapid destructive changes set up in the cornea and eyeball after section or destruction of the fifth nerve, the disordered secretion of the submaxillary gland after division of the chorda tympani, and the peculiar effects of division of a mixed nerve, such as the median, on the hand. But it has been shown that some at least of these phenomena are due to loss of sensation, to loss of vaso-motor control, to changes in power of resistance to the influence of temperature, and to other causes which are not essentially associated with a direct influence of the nerves upon the nutrition. It is at least doubtful at present whether the inflammation of the eyeball consecutive to lesion of the fifth is due to anything more than the exposure to irritation and arrested secretion, the experiments hitherto made being contradictory. In the same way the results of section of the vagi in setting up pneumonia, which were formerly cited as evidence of loss of nutritive control, have been shown by FRIEDLANDER and others to be equally produced by section of the recurrent laryngeal, and to be due to the entrance of foreign particles into the air-cells. The swollen and glossy condition of the fingers, with loss of balance of temperature and tendency to formation of sloughs, together with the other changes which result from section of the median nerve, are probably in great measure dependent on altered vaso-motor control, and are in part comparable to the effect of section of the cervical sympathetic on the ear of the rabbit in BERNARD'S well-known experiment. So, too, of the muscular atrophy which ensues on section of a motor nerve, and of some of the other changes in the limb which usually accompany such atrophy, of which the ingenious hypothesis of Dr. VIVIAN POORE of loss of reflex tonicity seems to afford the best explanation.

But over and above these changes, the pathology of which is in some degree explicable by altered sensation, loss of movement, and disturbance of temperature control and blood-supply, there are others which seem to establish a direct influence of the central nervous system on all nutrition. We owe to M. CHARCOT and his pupils much of the light we possess on this subject; we need only mention his observations on acute decubitus, on the changes in the joints in locomotor ataxy, and on amyotrophic paralysis, all of which afford proof of the profound changes which may occur under the influence of spinal disease. The greater number of the changes we have instanced are either of a destructive or an irritative nature, and are so regarded by M. CHARCOT. Perforating ulcer of the foot, and eschars on the sacrum and hips, afford good types of the destructive changes; whilst muscular atrophy, due to descending degeneration secondary to brain disease, or the atrophy with rigidity in the lateral sclerosis of "amyotrophic palsy," are examples of the latter.

We might reasonably expect that if these more profound changes are due to a direct nutritive connexion of the nervous system, and result from the more intense modes of irritation, there would be other slighter changes, less easy of recognition, and taking the form of nutrient abnormalities or overgrowths, where the stimulus was less intense. Probably the differences in relative development of different tissues, and in various parts of the body, are under direct nervous control in their original development and maintenance, and further pathological investigation will enable us to appreciate this point more fully. An interesting contribution to this study has recently been made by M. LANDOUZY, with reference to the abnormal development of subcutaneous fat in certain cases of muscular atrophy secondary to spinal or cerebral disease. The full record of his observations will be found in the January number of the *Revue Mensuelle de Médecine et de Chirurgie*. He records the case of a man, sixty-five years of age, who was seized with apoplexy, with only partial loss of consciousness, followed by right hemiplegia, which led to slow contraction

and atrophy of the paralysed limbs. As the atrophy of the muscles increased, the folds of skin on the wasted parts were found to become not only more distinct, but thicker than in the healthy limb, and the hairs and nails longer on the affected side. There was no marked difference in the temperature or vascularity of the two sides. Death having at last occurred from bedsores, followed by blood-poisoning, M. LANDOUZY was able to make a very careful study of the condition of the tissues of the limbs on the two sides. He found that the folds of skin pinched up were nearly double the thickness in the wasted as compared with those in the healthy limb, and that this was due solely to an increase of fat in the subcutaneous cellular tissue, which was also distinctly yellower than in the healthy limb, the dermis remaining unaltered. The cause of the paralysis was found in a patch of softening in the white matter of the left hemisphere, extending from the hinder part of the first frontal convolution to the posterior extremity of the parietal lobule, parallel to and very near the convolution of the corpus callosum. There was no other lesion found in the brain; the right half of the cord and the right crus cerebri appeared somewhat wasted. M. LANDOUZY also mentions other cases in which an analogous condition was found. Amongst these were cases of obstinate sciatica, of muscular atrophy in multiple sclerosis, in neuritis due to cervical pachymeningitis, and in other cases of amyotrophic palsy. He states that it is of exceptional occurrence in the wasting palsies, such as progressive muscular atrophy, habitual in secondary muscular atrophies, and variable in infantile paralysis. If this condition is of frequent occurrence, as M. LANDOUZY's observations seem to show (and they are supported by other evidence), it is one of great interest and value in its clinical and pathological bearings. Muscular atrophy may, as he shows, be concealed by the overgrowth of fat, and its nature, when observed in doubtful cases, may to some extent be determined by the coincidence of the fatty hyperplasia.

Of the various explanations which might be offered to account for this condition, M. LANDOUZY shows that some are untenable. It cannot be explained merely by the increase of nutritive supply or of nerve influence upon the subcutaneous fatty tissue owing to its diminution in the muscles, for it bears no direct proportion to the extent of muscular atrophy, and is entirely absent in some of the best-marked cases. Nor can it be due to want of movement and muscular action solely, for it is not observed in many cases of complete loss of motion, and it may be present where movement, though weak, is very free. In fact, by a careful examination of the possible explanations, M. LANDOUZY shows that no other reasonable cause can be assigned than the direct influence of the central nervous system, and that this appears to be exerted on the subcutaneous fatty tissue independently of the skin itself, the innervation of which appears to be separate. It may happen that changes in the skin itself, such as the eruptions which are occasionally seen in spinal or meningeal disease, may occur alone, or they may be associated with the fatty changes in the subcutaneous tissue, but the two are distinct and independent. And in the same way the effect of disease of cord or nerve upon the muscles of the limb may be atrophy from suspended action, and upon the subcutaneous tissue overgrowth of fat from increased stimulation; the two being collateral, but independent. Here, however, we enter upon a wide and interesting field of investigation, in which it is desirable that further clinical and pathological study should precede speculation; and the light which such observation may throw upon the obscure subject of nerve influence on nutrition is very considerable.

THE fact that the greatest and apparently, till recently, one of the most flourishing of our London charities is seriously embarrassed for want of funds, is not creditable, and it becomes a grave duty to determine why the authorities of the London Hospital have been compelled to sell upwards of £21,000 worth of stock to meet their current liabilities, and who is to blame for an occurrence which is likely to fall heavily upon the necessitous poor of its district. The London Hospital, with its 790 beds, is the only large hospital in the East of London, and supplies the wants of the sick poor in Shoreditch, Bethnal-green, Whitechapel, St. George's-in-the-East, Stepney, Mile-end, and Poplar. These districts have a population of more than 639,000, a large proportion of which is composed of work-people employed in the docks, railways, and numerous factories and industrial establishments which abound on all sides. In 1861 it appears that these districts had a population of 571,000 inhabitants, and from the returns of the London Hospital we find that in that year there were relieved 32,000 patients, or 1 in every 18 of the inhabitants. In 1871, the population having increased to 639,000, the hospital relieved 71,000 persons, or 1 in every 9 of the inhabitants. In both of these years the method of reckoning patients was the same, and it certainly is a very extraordinary fact that by these figures it appears that in ten years the need of hospital relief in the East of London had doubled, or else the population in 1871 had double the capacity for receiving hospital aid which it manifested in 1861. This is most remarkable, and needs explanation. In the year 1873 the method of reckoning out-patients was altered, the *renewals* of tickets no longer being counted as fresh cases, so that although the figures may appear smaller in the annual total, it does not follow that the daily average attendance of out-patients has really decreased. Last year, we are informed, the total of relief included 6825 in-patients, 47,361 out-patients, and 30,939 cases of diarrhœa, giving a grand total of 85,300 persons; so that it is probable that 1 out of every 7 or 8 inhabitants of the East of London sought relief of some kind at the London Hospital.

When charity is scattered with such lavish profusion there is of course a heavy bill to pay, and it is scarcely surprising that in a year of commercial depression like the past the contributions from the public were insufficient to cover the expenses; and yet, if we turn to the records of the hospital, it can hardly be said that it has not, at one time and another, received a fair share of public support. The legacies alone amount (since the establishment of the institution) to something like £400,000, and the annual subscriptions and donations of the public represent a huge sum of money. The total amount received from the public since the establishment of the hospital is not given in the report, but we gather that in recent years there have been several very successful "whips" in aid of

the funds. Thus, in 1860, £26,000 was collected; in 1864, £34,000; in 1866, £28,000; in 1872, a "special fund" of nearly £91,000 was subscribed; and, in 1876, the "Queen's Fund" amounted to nearly £24,000. Thus, in the last seventeen years, £203,000 has been given by the public in response to special appeals, in addition to the ordinary donations and subscriptions. A great deal of this money, no doubt, was spent upon enlargements of the building, and was hardly applicable for ordinary expenses, but we must take them into account before we accuse the public of according insufficient aid to the establishment.

Special appeals are a potent means of getting money, but it must be remembered that they exhaust the public purse. Hospital committees must bear in mind that they "cannot eat their cake and have it," and those who give to special appeals are very apt not to listen to the ordinary appeal. When special appeals are made for the purpose of increasing the accommodation, the needs of increased income are proportionate to the success of the appeal, and it should not be forgotten that every £150 spent in providing an extra bed requires the investment of at least £1250 for the endowment of that bed, or an assured income from public subscription of at least £50 per annum. Now when the London Hospital committee built the Grocers' Wing they collected for the purpose a sum of £115,000, and spent £30,000 in providing accommodation for 200 beds, £85,000 being left for the endowment of these beds. This £85,000 could not be expected to yield a larger income than £3400, a sum sufficient to support 68 beds at the most, so that the remaining 132 beds, requiring a minimum income of £6500 for their support, were left dependent upon the extra charity of the public. Turning to the actual financial position of the hospital, we find that in 1876 the certain income amounted to £14,207, the casual income to £8237, and legacies (which were all used for current expenses) to £7617. These sums, amounting to £30,061, were insufficient to meet the expenditure, and the excess of liabilities over income amounted at the end of the year to £16,645. In 1877, the deficit was so great as to require the sale of £21,770 stock, and the borrowing of £5000 to meet the current expenses.

What will be the end of a charity which is spending its legacies on current expenses, and shows an excess of liabilities over income of £38,000 in the past two years? In defence of a course of conduct which, we candidly confess, seems to us to savour of recklessness and prodigality, the Committee urge that their position is so peculiar that common prudence is impossible, and that the needs of the district are so great that to close any of the wards is not to be thought of. We are told that nearly every one of the 6825 cases treated in the house during 1877 was of so urgent a nature that no one would dare assume the responsibility of refusing admission to it. On this point we must reserve judgment until we are in possession of the medical and surgical reports, but the figures we give showing the proportion borne by hospital relief to population seems to us to indicate that the London Hospital has not been altogether inoperative in teaching the poor of its district how pleasant and easy a thing it is to get gratuitous relief. We do not wish to take upon ourselves the thankless office of blaming a body of gentlemen who have exerted themselves so nobly on behalf of their poorer brethren, but we would urge that it is a dangerous experiment for an institution which spends between £40,000 and £50,000 annually to be living from hand to mouth, and that the practice of using legacies and selling stock to meet current expenses, while no effort is made to reduce the work in proportion to the income, must eventually lead to bankruptcy. If an institution earns the character of spending its money recklessly, the public will get chary of giving to it; and we can hardly think that so many charitable persons would have bequeathed large sums to the London Hospital could they have known that within a short time their legacies would have vanished as completely as the last year's snow.

"Micawbers" in private life are pitied perhaps, but meet with little solid assistance; and public institutions who trust for their existence to "something turning up" are likely to share the same fate. We would strongly advise the London Hospital to give some solemn assurance that a certain part of its funds will, under no condition, be used for current expenses, and to encourage the public to contribute as they feel inclined either to the fund for current expenses or to the endowment fund. There ought to be no possibility of the two funds being allowed to act vicariously for each other. To keep a charity going by means of special appeals, with a large annual bill for advertisements and collectors' fees, is, to say the least, unsatisfactory, and we strongly advise that an attempt be made to manage the hospital with some regard for its future as well as its present needs.

Although the public seem to have responded with no little liberality to the various special appeals which have been made on behalf of the London Hospital, they do not appear to give it that amount of ordinary support which so large a charity, situated in the midst of manufacturing and other industries, has a right to expect. Two thousand pounds in annual subscriptions, and barely more in donations, is but a poor sum to be subscribed by the wealthiest city in the world; but it may well be that business men do not look with favour on the way in which the hospital administers its funds.

The City Companies do not figure as they ought in the list of subscribers. In 1876 we find that the Clothworkers head the annual subscriptions with £105. The Trinity House come next with 75 guineas; and the Drapers, Fishmongers, Goldsmiths, Mercers, and Salters follow after with 10 guineas each. There are seventy-six Livery Companies in the City, and we might expect them to be answerable for a larger proportion of the certain income of a great charity than is represented by the rather paltry sum of 225 guineas. Neither can the great merchants of the City be said to figure as they ought, although there are here and there very honourable exceptions. As for the large employers of labour, we think they must be made to pay for the sustenance, while in hospital, of all their workpeople who may be thrown upon the charity; and a fund should be formed by the co-operation of masters and workpeople, out of which a stated sum per week should be paid for those who are sick or injured. Now is the time for the Committee of the London Hospital to take a strong attitude. They are short of funds, and they have a right to give great employers—dock companies, railway companies, &c.—the option of founding a hospital for themselves, or of paying an adequate remuneration for the maintenance, while in hospital, of their *employés*. We are glad to see that

a "People's Fund" has been established in connexion with the London Hospital, from which £1300 was obtained in 1876. This, we hope, is the beginning of a movement to encourage the working classes to help themselves, and we feel sure that it will become a valuable source of income. While we sincerely hope that this great charity will be enabled to tide over the hard times which have come upon it, we would again counsel a little more prudence in the use of its funds, and a little "close-fistedness" towards the crowds of people—many of them as improvident as itself—who throng its gates.

WE all remember, and we all regret, how inadequately the great question of medical education was dealt with in the unprecedentedly long sitting of the Medical Council last year. The modes of teaching were left altogether undiscussed, and the only practical resolutions arrived at were one suggesting an examination of students at the end of the first winter session, and another recommending that in no subject should more than one course of lectures be compulsory. These resolutions no doubt imply a perception on the part of the members of the Council of the great defects of the existing system of medical education—namely, the long-deferred application of any test to the student of the use to which he is putting his powers and his time; and, secondly, the absence of personal and individual teaching, accompanied with demonstrations and practical work, as distinguished from elaborate and systematic lectures on subjects which cannot be apprehended in the abstract.

No doubt the resolutions of the Council, if acted on, would tend to bring the student to a reckoning and to a sense of responsibility at the end of the first year, and to make teaching more practical and demonstrative—in other words, more tutorial. It may be said—What can the student know at the end of the first year? To which we reply that, provided he is duly informed that he is expected to know something, there is nothing unreasonable in demanding from him proofs of considerable and valuable knowledge at the end of his first year. At the least, he might be expected in chemistry to give an account of the elements and of the laws of combination, and in anatomy of bones and ligaments; and this would imply no bad use of the first six months. When a student had given a good account of himself, and of the use of his time in this way, he would have grown in self-respect, he would feel at an early stage the advantage of industry and application; on the other hand, if he failed, he and his friends would have early proof of idleness, or unfitness for the work; or of bad teaching—which we are persuaded has very much to do with the bad results at examinations which we all so much deplore. The second resolution of the Council, limiting the amount of lecturing to which the student is to be compelled to submit, has received the universal approval of the profession.

But now arises the question: Are the recommendations of the Council being acted on by any of the examining bodies? We do not know of one of the bodies that has taken the slightest notice of the recommendations of the Council, much less modified its requirements, as regards the amount of lecturing, or that has made provision for a formal and statutory examination of students at the end of the first year. Let us take as a specimen the rules of the three Colleges of Surgeons of the United Kingdom. The English College requires candidates prior to admission to the First or Primary Examination on Anatomy and Physiology to produce certificates *of having attended lectures on anatomy during two winter sessions*. The Edinburgh College in its regulations says, "the first examination shall embrace anatomy, physiology, and chemistry ..... and shall take place not sooner than the end of the second winter session." But it is in Ireland where the system of lectures falls with greatest severity on the head of the devoted student, and reaches such a pitch that the wonder is that any cerebral faculty survives wherewith to undertake the serious ordeal of examinations. Here is the regulation applicable to students wishing to attempt their first examination: "The junior class shall produce certificates of having attended three courses of lectures on anatomy and physiology; three courses of lectures on practical anatomy, with dissections; two courses of lectures on chemistry, one course of lectures on materia medica, one course of lectures on botany, and one course of lectures on forensic medicine." These regulations are a strange comment on the resolution of the Council eight months ago, "that it is undesirable that any teaching or licensing body should insist on the student taking more than one course of lectures on any one subject." We must leave the Council and the teaching and licensing bodies to adjust their respective views. Our purpose at present is to show how much need there is of this adjustment, and how slow to take effect are the resolutions and recommendations of the General Medical Council.

But our further purpose is to point out how small a part of the urgent subject of medical education has been overtaken by the Council. They have given no opinion on the respective importance of the different subjects of the curriculum, on the great defect in schools of means for teaching students the nature of common everyday diseases, to say nothing of teaching them to diagnose and treat special diseases, as those of the uterus, of the eye, of the ear, of the larynx; on the best way of reducing the number of rejections at examinations, &c. A very spirited address has lately been delivered by Dr. ALEXANDER OGSTON, President of the Aberdeen Medical Students' Society, on Medical Training in Aberdeen and in the Scottish Universities. He is very severe in his charge against the existing system, especially as containing no provision for teaching students great and important branches of medicine, such as common domestic diseases little seen in hospitals, insanity, ophthalmology, diseases of the ear, &c. He condemns especially the way in which each professor tends to magnify the importance of his own subject, and tries to lengthen the time absorbed by it. He calls loudly for some limitation in the subjects of the first examination, even in anatomy, and complains that "these bloated preliminary subjects" prevent the student from learning, and his teachers from teaching, the practical parts of his profession, upon which his usefulness and his prosperity in life are so seriously to depend. The complaint that clinical teaching is not efficiently done is very forcibly met by saying that the curriculum is so loaded with lectures, and the time of the student so preoccupied with details that will be forgotten the day after his examination, that the weightier matters of skill in diagnosis, resource in therapeutics, and handiness in operation are

neglected. These are the great subjects in which guidance and wisdom are wanted. They are conspicuously subjects for the consideration of the Medical Council. But after twenty years they are unaffected by the action of a Council called *par excellence* the Council of Medical Education.

Annotations.

"Ne quid nimis."

UNQUALIFIED MEDICAL PRACTITIONERS, AND CAUSES OF DEATH IN YORKSHIRE.

SINCE we published, a week or two since, a letter from the medical officer of health for the rural sanitary district of Skipton, calling attention to the large proportion of uncertified causes of death in that portion of Yorkshire, we have received several communications on the subject, which make it desirable to direct especial attention to a state of things which is alike unsatisfactory to the public, the profession, the Local Government Board, and the Registrar-General. Let us first state a few recent facts bearing upon the case. In the last three months of 1877 the number of deaths registered within the registration district of Skipton was 203; in 128 of these cases the cause of death was certified by a registered medical practitioner; in 73, or 36 per cent. of the cases, the cause of death was uncertified, and in only two cases were inquests held. The district, which is a large one, contains seven registration sub-districts, and it should be noted that in Barnoldswick 26 out of 40, in Kildwick 15 out of 43, and in Addingham sub-district 22 out of 24 of the deaths were registered without the production of a medical certificate of the cause of death; in other words, the statements as to the causes of death inserted in the death register were uncertified. This state of things can scarcely be said to be exceptional, as in the preceding three months the proportion of uncertified causes of death was 39 per cent. Causes of death are uncertified in the death register from one of two reasons; either the deceased person has had no medical attendance during his or her last illness, or the attendance has been that of an unqualified or unregistered practitioner. When the proportion of inquests held scarcely exceeds one per cent. of the deaths, a large ratio of uncertified deaths from either of the above causes assumes additional importance, as it affords conclusive evidence that the relatives of the deceased have, knowingly or unknowingly, neglected to obtain the medical advice of a duly qualified and registered practitioner. If other coroners will follow the example of the coroner for Sheffield, and see the desirability of holding a few inquests in such cases, unqualified medical practitioners, whether practising on their own account or as the assistants of practitioners residing at a distance, will receive a wholesome discouragement. In the sub-district of Addingham 38 deaths were registered during the last six months of 1877, in 35 of which cases the cause of death was uncertified. The explanation of this state of things is that practically the whole of the medical work of the district is conducted by two unqualified assistants of a practitioner, who resides at a distance, and who holds the appointment of Poor-law medical officer. It is difficult to speak too strongly of the mischievous tendency of such a system, from whatever point of view it be regarded; and it is impossible not to agree with one of our correspondents, who writes that so long as such a system is tolerated, "prosecutions against unqualified practitioners acting on their own account must be regarded not only as unjustifiable, but hopeless, and so long will a serious injury be inflicted upon the profession and the public at large." Not only are the causes of death in Addingham (and to a less extent in other parts of the district of Skipton) not certified, but they are returned in such a way as to suggest the gravest doubt as to whether they are any more than the vaguest guesses at the true causes of death. Primary and secondary causes are not given in any case, neither are the durations of the disease stated. No less than eight of the twenty-four deaths in Addingham during the last quarter of 1877 appear to have been due to zymotic diseases, including three cases described as "fever on the brain," "infantile fever," and "bilious fever." It is not surprising that the medical officer of health and the Registrar-General should be dissatisfied with a system which fills the death-register with such loose statements. In this particular case we can scarcely doubt that, if their attention were called thereto, the Local Government Board could, and would, provide a remedy; but the general suppression of unqualified medical practice can only be effected by the profession being true to itself, and resolutely refusing all countenance to such a system as that which produces the present startling proportion of uncertified deaths in the district of Skipton.

THE VOTE ON THE ADMISSION OF WOMEN AT THE UNIVERSITY OF LONDON.

THE division-list of this vote has been published, and is interesting in many respects. The majority consists of 241, and is made up of 41 in the Faculty of Laws, 22 in the Faculty of Medicine, 178 in the Faculty of Arts; and the minority of 132 is made up of 8 in the Faculty of Laws, 84 in the Faculty of Medicine, 40 in the Faculty of Arts. Thus, 106 medical graduates took part in the division, of whom about one-fifth voted in favour of the new charter. Of the graduates in other faculties 267 voted, of whom 48 only were opposed to the charter, which was therefore carried by a large majority composed chiefly of graduates other than medical—an interesting point, seeing that the medical faculty was in reality chiefly concerned, and the discussion in Convocation turned mainly on the question of the admission of women to medical degrees, and through them to the practice of medicine.

It is remarkable that the *names* in the division-list differ greatly from those met with in the list of May last, and also from those met with in the lists of the several divisions taken at the extraordinary meeting of Convocation. The difference is so great that it must be doubted whether the voting is so representative even of the whole popular body as has been asserted. Speaking in round numbers, about 160 of the graduates in Arts and Laws who voted in favour of the charter had taken no part in the divisions of the past year, and had rarely put in an appearance at Convocation. This number leaves only 80 who had not voted previously, and we cannot but wonder at such facts while considering the important issues, or rather principles, at stake. And in reference to the "Noes," in regard to the supplemental charter, there is equal reason for surprise; for, of the minority of 132, upwards of 60 had not voted in any leading division of May last, and more than half of these 60 belonged to the Faculties of Arts and Laws. It is not necessary to point out that many medical graduates must have been prevented from attending the meeting of Convocation last month. Of these confusing numbers we refrain from asking our readers' further consideration; yet we cannot but think they show that a most extraordinary vote has been taken, and that there is room for reform in the manner of ascertaining the opinion of Convocation. For instance, nearly 300 medical graduates signed a memorial against the admission of women to medical degrees. Of these, little more than 80 were able to attend Convocation and record their opinion by vote. On the other hand, of about 40 medical graduates who declared, in answer to circular, their willingness to admit women, almost one-half appeared in Con-

vocation and voted in favour of the charter. The fact is, that a large number of these gentlemen live in the metropolis or its immediate neighbourhood, and had opportunities of attending Convocation; and it should be remembered that enthusiasts of extreme views will make (and, undoubtedly, have made) sacrifices of time, which men of moderate views do not make. From what we have said it is clear that on such important questions as the surrendering of a charter the greatest facilities should be given to graduates of a university in the way of voting. Why should not the vote by proxy be adopted in such momentous questions, when it is not refused in the Parliamentary election of the University, and in the election of members of the Annual Committee? We are convinced that the Senate of the University must feel that the vote of Convocation is less satisfactory than the numbers suggest when only superficially considered.

THE RECRUITS FOR THE ROYAL NAVY.

WHILST the thunder-cloud of war still hangs over Europe, and the dread of our being involved is still imminent, the report of Fleet-Surgeon Alexander Fisher, M.D., of the result of the examination of recruits for the Royal Navy for the year 1876 will be read with special interest. Of 2022 candidates rather more than half were rejected. Of these, 300 were pronounced unfit on account of imperfect sight, only 11 for defective intelligence; whilst the majority of rejections were for general unfitness, or for deficient physical development. Many of these, who failed in respect of height, but were otherwise desirable, were referred to the Admiralty for final decision, and out of 85 boys so referred, 82 were ultimately accepted. Others, too, that failed in general physical development were told that they might again present themselves at a later period, and many of these, on showing signs of better chest measurement, were subsequently passed. The report is not so unfavourable as at first sight appears, when we consider the class from which the recruits are drawn, and the age (fifteen to sixteen years and a half) at which they are taken. Mr. Street, in a valuable paper last year in the St. George's Hospital Reports, "On the development and growth of boys," founded on the results obtained from the examination of 3695 boys ranging from thirteen to nineteen, shows that, while from fourteen to fifteen the gain in height is only one inch, between fifteen and sixteen there is a marked growth of three inches. The period, then, of a lad's life between fifteen and sixteen becomes, as Mr. Street remarks, one of the utmost consequence to him as regards his development; for if he be at such a season subjected to great strain upon the strength, exposed to depressing employment, if he be badly fed or submitted to the evil influence of defective hygienic arrangements, his development must suffer, and the result will be at the least a stunted growth, even if the boy were formerly healthy. Yet these are the conditions which the majority of the lads who present themselves as recruits have been for years subjected to, therefore it speaks well for the inherent vitality of the race that so many of its youth drawn from its lower strata are found fit for an arduous profession, whilst others also exhibit a power of recovery when brought under better hygienic influences, and ultimately come up to the required standard. As we stated last week, a Bill is to be brought forward this session in Parliament to furnish boards of guardians with powers to provide training schools, with ships in connexion with them, for the education of pauper lads for the Royal Navy and Mercantile Marine. Should this power be granted, we may speedily look for an improvement in the physique and general soundness of the boys presenting themselves, for, as we pointed out, the monotomy of the present schools, and the confinement within brick walls, often in the impure atmosphere of towns, and the inadequate provision for healthy exercise, checks development, which would be promoted by the more varied nature of the training on board ship, and the opportunities for healthy and stimulative exercise, together with the advantage of purer and better air.

MEDICAL LEGISLATION.

SHOULD the Eastern Question be the subject of an early and amicable settlement, the Government will be somewhat in want of occupation. In these circumstances it is not impossible that it may consider whether something should not be done in the way of amending the Medical Act. Lord Sandon's words, in answer to Mr. Mills, seemed to imply that the Government were contemplating some such legislation. Dr. Lush gave notice on the first night of the session that he would bring in a Bill for this purpose. But his Bill deals only with the penal clauses of the Medical Act. Though these clauses require amendment, it is clearly desirable that their alteration should form part of the general amendment which the Act so much needs. There are two or three reasons why the Government should act with earnestness in this matter. One reason is that we are still afflicted with a large number of medical examining bodies, each giving only half a qualification. Not only is the diploma given by these bodies an imperfect instrument, but they compete to some extent with each other, and so tend to keep down the standard of medical education. It is true that, as regards England, there is a prospect ere long of seeing realised a Conjoint Board, in favour of which all the examining bodies will merge their individual rights and powers. But this will be a very costly and complicated arrangement, and will leave uncured the evil of competition. The Scotch and Irish bodies refuse to consolidate themselves, and will continue to give their individual and incomplete diplomas. The removal of such an evil is work worthy of a strong Government, and an earnest educationist like Lord Sandon. Nothing would be easier than to create a satisfactory examining board in London, Edinburgh, and Dublin respectively, were it not for the vested interests of the medical corporations and the fact that these corporations are so preponderatingly represented in the General Medical Council. Any satisfactory amending Act should amend the constitution of the Council by making it more representative of the profession, and less representative of mere colleges and corporations.

Another strong reason for Government undertaking the amendment of the Medical Act is the position of the question of international recognition of degrees. The Legislative Chamber of the French Republic, not long ago, showed a very unpleasant disposition to disqualify all English medical men practising in France. The question was postponed rather than settled by the Government, and, with the return of political leisure, is pretty sure to revive. It is desirable that we should show some disposition to do to France and other countries what she has, after a fashion, done—namely, recognise in some way practitioners possessed of qualifications which would give them medical standing and respectability in their own countries. This concession has been advised in different forms at various times by the Medical Council, and should not be delayed. Our own colonies, too, naturally demand the recognition of their best diplomas.

The amendment of the penal clauses, though the last, is not the least important part of any amending work to be done on the Act of 1858. Efforts to secure better medical service for the public will be unavailing if all false forms of medical practice are not discouraged and punished. It is to no purpose to create costly bodies for examining medical men, and another costly body for supervising these bodies—all, by the way, supported solely, and most unjustly, by the medical profession—and then to connive at unqualified

practice. The penal clauses of the Medical Act are the complement of those clauses which empower the examining bodies to exact high degrees of knowledge as a condition of qualification and registration, and they should be efficient, as they are not now.

THE LONDON SMALL-POX EPIDEMIC.

DURING the two weeks ending the 2nd instant, whereas 74 fatal cases of small-pox were registered within what is called registration London, no death from this disease was recorded in the nineteen large provincial towns dealt with in the Registrar-General's Weekly Return, and having an aggregate population nearly equal to that of London.

The fatal cases of small-pox in London, which in the two preceding weeks had been 51 and 34, were 38 in the week ending the second instant, of which 22 occurred in the Metropolitan Asylum Hospitals, 4 in the Highgate Small-pox Hospital, and 12 in private dwelling-houses. Six of the deceased small-pox patients had resided in Bow and Poplar, 5 in Hackney, and 4 in St. Pancras. Of the eleven fatal cases occurring in private dwelling-houses, under circumstances which rendered successful isolation of the patients more than doubtful, 3 occurred in Lambeth, 2 in Hackney, 2 in Bethnal-green, and 2 in Bow. The 38 fatal cases of small-pox in London included 17 which were certified as unvaccinated, and 10 as vaccinated, while in the remaining 11 cases the medical certificates gave no information as to vaccination. This is to be regretted, as anti-vaccination agitators are continually asserting that all "not stated" cases are vaccinated cases, although from the large proportion of children they include, evidence is strongly in favour of their being principally unvaccinated cases.

The statistics of small-pox hospital patients continue to afford conclusive evidence that the prevalence of the epidemic is still increasing in London. The number of small-pox patients in the Metropolitan Asylum Hospitals, which at the beginning of October last had declined to 137, has since gradually increased to 415, 468, 505, and 542 at the end of the last four weeks. No less than 146 new cases were admitted to these hospitals during the week ending the 2nd instant, against 129 and 126 in the two preceding weeks. The Highgate Small-pox Hospital, too, contained 56 patients on Saturday last, against numbers increasing steadily from 26 in the five preceding weeks.

WOMEN AND THE CONJOINT SCHEME.

ATTENTION has been drawn by a letter in a lay contemporary to the Conjoint Scheme and the effect which its adoption by several of the licensing bodies (the University of London amongst others) will have on the admission of women to practise medicine. As many strange errors have arisen on this point, we venture to state the actual facts, which are plain enough. The University of London, though it has not been practically a licensing body (for the number of its graduates who were not "licensed" before taking its degree can be counted on the fingers), is really as much a licensing body as the College of Surgeons or the Apothecaries' Hall, and any person possessing its degree is legally entitled to be registered and to practise medicine. A learned law graduate seemed to have doubts on this point at the late meeting of Convocation of the London University, much to the surprise of the medical graduates present. But under the Conjoint Scheme things will be changed, if that scheme come into operation as now projected, for by entering it the University of London surrenders its right to admit candidates to its degree in medicine unless such candidates come armed with the triple licence which those who have passed the conjoint examining board will possess. The triple license includes the membership of the College of Surgeons, the licence of the College of Physicians, and the licence of the Apothecaries Company. These qualifications, of course, will entitle their possessors to registration as legally qualified practitioners, and it is plain therefore that the Conjoint Board will be the future licensing body, and it is equally plain that if the Conjoint Scheme should come into early operation it will have more effect on the admission of women to the practice of medicine than the University of London. The latter body has agreed to surrender its right to admit candidates to its degrees unless they have passed the conjoint examination, and we do not suppose it will make a special exception in favour of its female candidates, no matter how ambitious it may be to admit them within its walls. It is likely, therefore, that the whole question of women-doctors will receive a more thorough investigation than has yet been given to it; and though the "present state of public opinion" and the action of the University of London are largely dwelt upon in deprecation of any attempt on the part of the Conjoint Board to refuse admission to women, it is fair to assume that this Board, with a will of its own, will take the trouble to inquire whether the "present state of public opinion" is as favourable to extreme steps as the woman's party would have us believe. And, without meaning the least disrespect, we feel bound to say that we cannot accept the decision of the University of London, with the history of the women's question, so far as it is concerned, before us, nor that of the Irish College of Physicians, which admits women to its diplomas, as final in the settlement of the question. If the Conjoint Scheme comes into operation on the terms already agreed upon by all the licensing bodies in the metropolis, it will be for the new board to decide whether women shall be admitted to its examinations or not; and on its decision, therefore, will rest whether women shall or shall not be admitted to the London University degree. The condition of things is peculiar in many respects, and we shall be sorry if the action of the University of London defers, what is more important than the admission of a few women to the medical profession, the general advance of medical education.

MIDWIFERY RULED TO BE MEDICAL PRACTICE.

A VERY important decision has been confidently given by Vice-Chancellor Sir Richard Malins to the effect that an assistant restrained, by contract with a principal, from practising as a surgeon is thereby restrained from practising as an accoucheur; in reverse words, that to practise as an accoucheur is to break a contract not to practise as a surgeon. The case—Marsh *v.* Farrant—which gave rise to this judgment has been repeatedly before the High Court of Justice. In September last an injunction was obtained to restrain the defendant from practising as a surgeon within three miles of Wandsworth, in accordance with an agreement he had entered into with the plaintiff. In spite of this, he persisted in practising at least midwifery. Accordingly, on Jan. 24th, an application was made for an order to commit him to prison for contempt of court. Ample evidence was given of his practising. Amongst other things, a chemist put in an affidavit that he had dispensed about 180 bottles of medicine for the defendant in the month of November, and about a dozen prescriptions were produced. The defence was that the business of an accoucheur did not come within the terms of the agreement. When the case came up again, on Feb. 2nd, the Vice-Chancellor said he was most distinctly of opinion that practising as an accoucheur was contrary to the terms of the agreement entered into by the defendant not to practise as a surgeon. Mr. Willis thereupon said that, if that was his lordship's opinion, the defendant would apologise to the Court and pay the costs of the proceedings. The Vice-Chancellor said, in those circumstances he would not commit the defendant to prison. But he added that if the defendant practised in any way again he would not accept any apology. The

decision of Sir Richard Malins is one which, whatever the abstract law on the subject, is worthy of the Chancery Division of the High Court of Justice. But for this judgment, it would be possible for any assistant, after agreeing not to practise, to take away a considerable portion of the patients to whom he had been introduced by a too confiding principal. Dr. Marsh has done good service to the profession in carrying the case to a high court.

THE INQUIRY INTO THE DEATH OF COLOUR-SERGEANT M'CARTHY.

THE sudden and tragic death of M'Carthy, so soon after his liberation from the convict-prison at Chatham, and on the day after his addressing a sympathising crowd of his fellow-countrymen in Dublin, has attracted so much public attention, and has been so freely advanced as a proof of the ill-treatment of political offenders, that an inquiry has been ordered by the Government. This began on Monday last, and is being held by Sir James Ingham. We do not purpose discussing the merits of the case pending the inquiry, but would merely state that the reports in the Irish daily papers are obviously one-sided, and are more sensational than scientific. Evidence will, we understand, be forthcoming to show that the deceased was well known to be suffering from cardiac disease during the last years of his convict life, that he was frequently attended for this malady by the medical officers at the prison, and that he was only subjected to the lightest and least arduous form of prison labour. If he had not been well looked after, it is clear that there would have been an increase in the signs of cardiac weakness, as well as a loss in body-weight, when he left the prison, instead of the opposite, which was the case. Of course, the excitement to which he was exposed by his injudicious friends was the worst thing they could have done for him in his condition, and at once explains his sudden attack of syncope at the meeting and subsequent death. We shall be anxious for the report from a medical point of view, and we hope that, as Sir James Ingham is permitted to have a medical assessor, he will take advantage of this, and secure the assistance of some well-known and experienced physician.

BRITISH MEDICAL BENEVOLENT FUND.

THE annual meeting of subscribers to this fund was held on the 10th of last month at Messrs. Churchill's, New Burlington-street, when the report of the Committee was presented, and the officers were chosen for the ensuing year.

The hard times have pressed heavily on the resources of the fund, for not only has the number of applicants for relief been larger than hitherto, but there has also been a smaller amount of money wherewith to help them. In no year since the establishment of the fund in 1836 has so much been expended in giving immediate aid, £1640 having, by the aid of a bank deposit, been distributed in the form of grants to needy members of the profession, their widows or their children. It has been doubted whether there really is such distress in the medical profession as can be relieved by small grants of money, but it is a fact, with which perhaps only those conversant with the working of this charity are familiar, that there are numbers of medical men, or their relatives, whom such help does preserve from abject poverty. There are persons, nearer to them than many may imagine, for whom a few pounds at once, or a few shillings in weekly doles, provide the only means of sustenance. Another branch of the fund is that for giving annuities of from £10 to £25 to deserving members of the profession above sixty, but the number of applicants is so large that it is rare for anyone to obtain this boon before the age of seventy. The working expenses of the fund are small beyond those for postage and printing. The officers are all honorary, and the room in which the committee meets monthly is very kindly lent by Messrs. Churchill. We venture, therefore, to urge the claims of this fund upon the charity of every medical man. There are many, we believe, who do not give because the existence of the fund has been unknown to them, and we would ask them now, with these few facts before them, to do all they can, and to get others—their friends in the profession, and not less their friends in the laity—to help this really benevolent work. The Treasurer, Dr. Broadbent, 34, Seymour-street, Portman-square, W., or the Financial Secretary, Mr. Herbert W. Page, 28, New Cavendish-street, W., will gladly acknowledge any new subscriptions or donations which may be sent to them.

THE MEDICAL COUNCIL IN THE COURT OF QUEEN'S BENCH.

ON the 28th of January, in the Queen's Bench Division of the High Court of Justice, before the Lord Chief Justice and Mr. Justice Manisty, an application was made by a medical man, who was struck off the Register in 1865, under Section 14 of the Act, for an order on the Medical Council to restore his name. Section 14 empowers the Council to remove the names of persons who have not answered to the inquiries of the Council concerning change of residence, continuance in practice, &c. But about 1876 application was made to the Executive Committee to restore the name, which the Committee declined to do, in a resolution simply declaring that they "did not see fit to make an order to that effect." The Lord Chief Justice expressed the opinion that there was not a power to remove a name from the Register on a charge of professional misconduct without giving the person accused a hearing. This seems very good law and justice, and the counsel for the Council, Mr. J. Brown, Q.C. and Mr. C. Bowen, undertook that the Council would act accordingly. It is to be regretted that the Council, or its Executive Committee, should have put itself into an indefensible position. It is one thing to remove a name from the Register on the score of not being able to get information about the person, and another to refuse, without a hearing, to restore his name. There may be good reason for not restoring the name, but judicial functions should be exercised under judicial conditions, the first of which is that the person to be judged have a good opportunity of stating his own case, and making his own defence.

WHAT'S IN A NAME?

A MEDICAL contemporary published last week, for the edification of its readers, a report of Professor Huxley's lecture on Harvey, delivered at the Royal Institution on the 25th ultimo. Unacquainted even with the names of the most illustrious pioneers of anatomy, our contemporary represented Professor Huxley as making the absurd statement that "about 300 B.C., in the famous school at Alexandria, there arose a body of scientific anatomists, among whom there were two (Hierocles and Aristippus), the amount of whose knowledge that had come down to us was very considerable; the last understood the operation of the valves." Elsewhere the name "Hogg" appears for Hobbes. If the writer had only had the sagacity not to commit himself to names, he might have still been inaccurate, but he would not have appeared ridiculous. None of the numerous persons who are said to have borne the name of Hierocles, or the individual best known in history as Aristippus, ever made any pretensions to anatomical knowledge; they certainly did not figure among the great men who flourished at the Alexandrian School three hundred years before the Christian era. Of the several persons called Hierocles, the first lived about one hundred years before Christ, and the last about seven hundred years after, and were

anything but anatomists; while, as to Aristippus, he was at one time a disciple of Socrates, but was cast off by that philosopher on account of his avarice, profligacy, and sensuality, and his associations with a notorious courtesan. There were, however, two eminent anatomists of the Alexandrian school, about the time referred to, called Herophilus and Erasistratus, and the latter is usually credited with the discovery of the valves of the heart. But, after all, Hierocles is near enough to Herophilus, Aristippus to Erasistratus, and Hogg to Hobbes, to satisfy the critical and classical requirements of the periodical in question.

THE BRITISH MEDICAL ASSOCIATION AND UNWOMANLY WOMEN.

UNDER the above heading, in our last issue, we directed attention to the withdrawal of Dr. Wilson Fox from the British Medical Association, a proceeding rendered necessary by considerations of propriety and self-respect, as the Council of that Association had decided that it has no power to exclude women from membership, or even to put a stop to the indecency of their participation in ordinary meetings. This decision is the more astounding, because in the course of 1875-6 a circular was, it seems, addressed to members of the British Medical Association, in pursuance of an instruction issued to the secretary at the annual meeting in 1875, asking an expression of opinion as to the expediency of admitting women, the answer to be "Yes" or "No." The returns furnished in 1876 show that the *Noes* numbered 3072, while the *Ayes* were only 1051. The large majority of members declaring against the proposal might have been supposed to be conclusive as regards the question at issue. Such does not, however, appear to have been the view taken by the Council. It is well that this should be understood.

DOMESTIC HYPODERMIC INJECTIONS.

WE cannot too strongly protest against a practice which seems to be far from uncommon—that of doctors permitting their patients to administer morphia subcutaneously for themselves. Several instances of this questionable proceeding have lately come under our notice. A young lady, the victim of neurotic symptoms, was actually taught by an eminent London physician to carry out this system of self-doctoring, and has never ceased to soothe herself with it nightly, whether necessary or not, since she was so educated. A middle-aged lady, who has been in the habit of administering it to an invalid sister for some years, rewards herself at the same time with a dose in the neck, which is seamed with ugly scars from the frequent repetition of an operation conducted too often in very close propinquity to the external jugular vein. But these examples will suffice to prove the inexpediency of allowing a drug so potent in a moral as well as in a physiological point of view, to be wielded in an indiscriminate manner by patients utterly uncontrolled by the responsibility attaching to its use by properly qualified medical practitioners.

CRIMINAL LUNATICS.

THE recently-issued report of Dr. Orange, medical superintendent of the Broadmoor Criminal Lunatic Asylum, showing the general condition of the establishment during the year 1876, although not presenting any exceptionally interesting feature, contains much instructive information, and bears evidence of the efficient management and supervision which has from the commencement marked Dr. Orange's tenure of office. The asylum is capable, when full, of accommodating 413 men and 150 women, and the daily average number resident during the year under notice was 498. In the classification of the crimes and sentences of the 45 persons admitted in the course of the year we find that 11 men and 5 women were charged with murder, 1 woman with manslaughter, 8 men and 1 woman with attempts to murder or with wounding, the remainder being charged with lesser offences. The rate of mortality, reckoned on the average number resident, was 4·01 per cent., the average age at death being forty-six years. The cost of maintenance per head was £54 19*s.* 1*d.* It is satisfactory to learn that no form of mechanical restraint was used in any part of the asylum during the year. The means of recreation and solace provided for the inmates include a library, the daily and weekly journals and periodicals, billiards, bagatelle, chess, draughts, cards, dominoes, while during the summer months there is cricket and croquet out of doors. A band of music composed of attendants and patients, and at present including seventeen of the latter category, plays twice a week in the establishment. The council of supervision some time back recommended that certain structural alterations and improvements should be made in the asylum, and consideration of these matters was referred by the Secretary of State to a committee. The committee has presented its report, but the decision of the Secretary of State had not, at the date of the issue of the returns we have been considering, been made known.

PROVIDENT DISPENSARIES IN BIRMINGHAM.

THE question of provident dispensaries is exciting great attention, and causing much controversy both in professional circles and among the general public. The scheme propounded by the original Town Hall Committee meets with little general favour. On that committee there were only three medical men, and one of them has publicly disclaimed all share in the passing of the rules. The new aspirant for popular favour meets with little countenance at present from the medical profession, and without that countenance it can never hope to prosper. The Midland Medical Society, and the local branch of the British Medical Association, have appointed a joint committee to consider the proposed rules, and "to take such steps as they may deem necessary in the twofold interest of the public and the profession." The Town Hall Committee have now come to see the value of the sympathy of the profession; they have expressed their satisfaction at the step taken by the two societies, and have desired conference with them for the consideration of the whole subject. We trust that the conference will be able to so alter or modify the present scheme as to make it alike acceptable to the profession and serviceable to the public.

THE ILLEGAL SALE OF CYANIDE OF POTASSIUM.

AT the Lincoln Winter Assizes a coiner was convicted. In the course of the trial it transpired that the prisoner had bought two ounces of cyanide of potassium of Mr. Shepperley, a chemist of Nottingham. Baron Huddlestone very properly suggested that the local authorities should take proceedings against the local chemist. These were taken. The defendant pleaded guilty to having sold the substance without making any entry in his book, but his solicitor pointed out that as the cyanide was much used by photographers and electroplaters, chemists were often placed in difficult circumstances. We see no excuse in this fact for the defendant's neglect in the case in question to make the entry required by law. The sale of poisons is still far too loosely carried out.

SURGEONS NOT "DENTISTS."

AN extraordinary oversight has evidently occurred in drawing the "Dental Practitioners Bill," unless, indeed, it be intended to deprive fully-qualified surgeons of the right to practise dentistry. Section 3 of this remarkable measure recites: "Any person who, after the first day of

August, 1879, not being registered *under this Act*, takes or uses any such name, title, addition, or description as aforesaid [that is to say, dentist, either alone or in combination with the word surgeon, or with any other word or words, 'dental-surgeon,' or 'dental practitioner'], shall be liable, on summary conviction, to a fine not exceeding *twenty pounds*." The effect of this is, of course, to disqualify Members and Fellows of the College from practice as "dentists" so described. Registration under the Medical Act counts for nothing. Surely the attention of the profession should be directed to this matter.

COMPENSATION FOR LAUNDRY DISINFECTION.

THE Chelsea Vestry has taken the initiative in carrying out the suggestions so often brought forward in these columns. The vestry officers, having ascertained that a case of small-pox had occurred at a laundry, compelled the laundress to leave off work, and thus saved her customers from the danger of contagion. But this interruption in her business caused the woman to lose her patrons, and she was unable to pay her rent. As, however, her private interests had been sacrificed for the public good, she had a moral claim to compensation, and this principle was, after considerable discussion, recognised by the vestry. It is true that only thirty shillings compensation was allowed, a sum which, we should imagine, must have been very inferior to the loss incurred; nevertheless, the principle was admitted, and a wise and valuable precedent established. Unless the right to compensation is universally acknowledged, poor people will undoubtedly continue to conceal the cases of infectious disease that may occur in their homes, for fear of losing their slender means of earning a livelihood.

A THIRD ASYLUM FOR SURREY.

WE sincerely hope the long-meditated proposal to build a third asylum for Surrey will not be allowed to take the shape of a definite scheme until the expediency of making separate provision for chronic cases has been more thoroughly discussed. The example of Middlesex in dealing with this question might be studied as a warning. The new asylum at Banstead is understood to be crowded with incurable cases, while the overgrown institutions at Hanwell and Colney Hatch, so ill adapted for curative purposes, are still burdened with the cure of acute cases. With the experience of Brookwood and the example of Banstead before them, the justices of Surrey might arrive at the conclusion that the need of "further accommodation" will never be satisfied until a well-ordered establishment of *small size* is specially constructed for hospital work, leaving the asylums to be used as places of residence and safe custody for the cases which the *hospital* fails to cure. It is with great regret we see indications that Surrey is likely to miss the opportunity of illustrating a wise policy and taking the lead in a matter of progressive reform.

QUACK ADVERTISEMENTS IN POPULAR PAPERS.

IT is to be regretted that some of our popular contemporaries do not see it to be their duty to exclude quack advertisements from their columns. They may be seen by the half-dozen in some papers, having reference to all subjects, from nervous debility, with all the mysterious and terrifying suggestions which are conveyed to the ignorant by that expression, to deafness and noises in the head. We are not unmindful that in papers of more pretention medical advertisements in another form appear, but they do not affect in this way the less wealthy and informed class of the people who fall a ready prey to the ordinary quack advertisements. It is a slight matter to our contemporaries either to insert or refuse insertion to the advertisements in question, but by refusing them they would save many a poor man from the most cruel forms of quackery, and forms as costly as they are cruel.

THE GROCER'S LICENCE.

IN a case recently before the Court of Appeal, the Lord Chief Justice expressed an opinion in favour of the sale of wine and spirits by grocers, controverting the opinion that special facilities were offered by this licence for the practice of secret drinking among women. Sir Alexander Cockburn thinks "women who wish to drink are sure to get it, and are more likely to get it at the publican's." As a matter of fact this judgment is opposed to experience. Women who "wish to drink" do *not*, unless they belong to a class wholly given over to debauchery, frequent public-houses; nor have they means of procuring supplies from that source. They purchase from the grocer when buying other stores. The Lord Chief Justice is unassailable in his law, but on the question of fact we have no hesitation in saying that his ruling is distinctly opposed to experience, and, even on the score of logical inference, its fallacy stands exposed.

A JOINT meeting of the members of the North Western Association and of the Yorkshire Association of Medical Officers of Health was held last week at Rochdale. After inspecting the corporation sewage works, the visitors assembled in the Town Hall, under the presidency of Mr. S. W. North, when Dr. Wilson read a paper "On the Rochdale system of dealing with night-soil and house refuse," in which the author extolled the tub [or pail method. Dr. Britton then introduced the subject of "The Influence of the Birth-rate upon the Death-rate," which was discussed at some length, the majority of the members appearing to be opposed to Dr. Britton's views. After adopting a resolution in favour of the Bill now before Parliament for the amendment of the Public Health Act, 1875, so far as relates to the supply of water to rural districts, a vote of thanks was passed to the chairman, and the proceedings terminated.

LAST week there was a considerable decline in the London mortality-rate, having been 24·8 per 1000, against 27·6 and 27·2 in the two previous weeks respectively. As mentioned elsewhere, the deaths from small-pox rose slightly, whilst those from the other principal zymotic diseases showed an aggregate diminution. To measles 56 deaths were attributed, to scarlet fever 43, to diphtheria 9, to whooping-cough 89, to different forms of fever 20, and to diarrhœa 11. The fatality of diseases of the respiratory organs was less than it had been for two or three weeks previously, 448 persons having died last week from affections coming under this heading.

THE Regius Professorship of Physic in the University of Dublin, vacant by the death of Dr. Stokes, will be shortly filled up. The candidates include some of the leading physicians in Dublin, but it is generally believed that Dr. John Thomas Banks, formerly King's Professor of the Practice of Medicine in the University, will be selected as Dr. Stokes' successor.

MESSRS. BARRAUD AND JERRARD have, we are informed completed, for the Royal Victoria Hospital at Netley, a life-size portrait of the late Dr. Parkes, which will be on view at their rooms, 96, Gloucester-place, Hyde-park, from the 11th to the 16th inst.

WE regret to have to announce the death of Dr. Fleetwood Churchill, which took place on the 31st ult., at Ardtrea Rectory, Tyrone. An obituary notice of the deceased obstetrician will appear in our next number.

UNDER the Apothecaries' Act, on the 29th ult., the Medical Alliance Association sued a registered chemist named John Hamilton, of Oxford-street, for illegally acting as an apothecary. Mr. Morgan Howard, Q.C., and Mr. Pollock prosecuted; and Mr. Prentice, Q.C., and another learned counsel, were for defendant. A verdict for £20 and costs was given against him.

ACCORDING to statistics received from Japan, no less than 11,675 persons were attacked with cholera between the 16th of July and the 30th of November last year. Out of this number 6297 died. The proportion of deaths in Japan from cholera is very similar to the rate of mortality among patients suffering from this disease during the European epidemic of 1832.

THE Committee of the Westminster Hospital has decided to appoint an Aural Surgeon, and we hear that Mr. Keene has resigned his position as Assistant Surgeon to become a candidate for the vacant post. Mr. Pearce Gould, Lecturer on Anatomy at the Westminster Hospital School, is a candidate for the appointment of Assistant Surgeon.

REPORT
OF
The Lancet Special Commission
ON THE
CONTAMINATION OF UNIFORMS PROVIDED BY THE ARMY CLOTHING DEPOT.

THE manufacture of uniforms for the army is, to some extent, under direct Government supervision. Speaking in round numbers, two thousand persons are employed to work for the Army Clothing Depôt at Pimlico; and as this is a Government institution, administered by officials employed by the State, we may reasonably look to them for an example in the application of the spirit, as well as the letter, of the laws relating to factories and workshops. We have already pointed out, in a special report on the sweating and home-work systems, how disease is spread by tailors who make clothes in fever dens; but we had hoped that in so gigantic an undertaking as the production of uniforms for the British army, precautions which cannot be expected at the hands of a small private tailor would be stringently enforced in what should be a model Government factory. In this anticipation we have, however, been signally disappointed; and, though it would certainly be safer to wear uniforms produced at the Pimlico Depôt than those that are made by contractors and sub-contractors, we fear that, whatever their origin, the clothes given out to the army are but too often impregnated with the germs of disease.

It is not to the purpose to describe at length how the uniforms are made. But few factories are so large, lofty, roomy, and well-ventilated as the work-rooms of the Army Clothing Depôt. If all the uniforms were made on the premises the danger of infection would be reduced to a great extent. But, apart from the large amount of clothing supplied by the contractors, many of the workwomen are allowed to take the uniforms home. The condition of these homes, therefore, becomes a matter of paramount importance; and some official correspondence on this subject, which we were permitted to read, gave us some insight into the state of affairs. For instance, Mrs. Fairfield, the widow of Lord Herbert's private secretary, writes, that having called on some poor needlewoman, she found a sempstress who had just died from confluent small-pox. Her body was covered with some soldiers' greatcoats, which the women had been making! At the same time we find a complaint that the viewer of this division was attacked by small-pox, which he attributed to handling and examining the clothing made in infected houses. These facts occasioned some slight stir, and Professor Tyndall was consulted as to the danger soldiers incurred by wearing uniforms thus infected. In his answer the learned professor stated that this would be "at least as murderous as exposing them defenceless to the bullets of an enemy."

The authorities have consequently taken some precautions. A notice of rather ancient date is not only hung on the wall, but its rules are enforced. It states that when cases of small-pox or scarlet fever break out in the domiciles of persons in the employ of the factory, they must, under penalty of dismissal, be immediately reported. If there be danger of infection, these persons will not be allowed to attend at the factory, but will receive half-pay during their absence. This latter clause, however, only applies to the time-workers who are in receipt of regular wages, and these are in the minority, the greater part of the workers being paid by the piece. They are generally very poor, and often belong to the lowest class. When fever breaks out in a family of piece-workers they lose their all if they report themselves, and this just at a time when sickness increases their expenses. They are consequently prone to resort to the strictest secrecy, and the presence of small-pox or scarlet fever in their midst is often only discovered after a death has taken place. Then, when all the mischief has been done, they are dismissed from the factory. Nor in such cases are any special precautions taken to seek out and disinfect the clothes which they have made within the factory during the time of illness. These infected uniforms are piled up with the others that come from more wholesome workers, so that the good are spoilt by the bad, and the evil is more universally distributed. We are sometimes startled with the knowledge that an epidemic has broken out in a regiment. The barracks and neighbourhood are inspected, and to no purpose; but we would suggest that on all such occasions inquiries should be made as to whether any new uniforms have been distributed to the troops.

That the uniforms are often a source of considerable danger to the health of the troops who wear them will be readily acknowledged by all who visit the homes inhabited by the workpeople in the employ of the Army Clothing Department. The prevalence of disease in these dwellings is, of course, not easily discovered, as the utmost precautions are taken to conceal a fact so damaging to the interests of the workpeople. No means are taken to purify clothes provided by contractors, even when these are known to be infected. The clothes made at home by the factory hands are placed in a box and fumigated, when it is proved that they come from a fever den. This is not, however, often the case, and the authorities have refused to construct a proper apparatus for disinfecting purposes, and nothing whatsoever is done to the clothes made within the walls of the factory by people who have come from a house where disease is prevailing. We limited our investigations in this matter to the streets in the immediate vicinity of the factory, deeming that the shorter the distance from home to the workshop, the more probable the transmission of germs from the bedside to the cloth of the uniforms made within the walls of the depôt. The factory, it is well known, is situated facing Pimlico Pier, and lies between the Thames and Lupus-street. A few hundred paces to the west, Rutland street and terrace, Hanover-street, and Caledonia-street have houses where the rent charged for a lodging is not always beyond the means of a factory hand. Of these Rutland-street is perhaps the worst; and here we made one or two visits. We entered one house which we were assured by a local practitioner has never been thoroughly free from fever. Here we found that the landlady, who occupied the parlour floor with her four children, had, together with three of the children, suffered from scarlet fever last September. Immediately underneath, in the front kitchen, lodged a pensioner and his wife. The drains being out of order, this basement was constantly invaded by foul odours. The pensioner lost his mind, and was fortunately removed to the asylum in time to escape the fever, but his wife, a dissolute woman, remained in her unwholesome dwelling, making towels for the army in her sober intervals, and always allowing them to lie scattered about in her fever-stricken den. This case was not, we believe, reported to the

inspector of nuisances, and this house has consequently not been disinfected.

Two doors further off, in the same street, two cases and one death from scarlet fever occurred in April last, and another case in the ensuing month. Here also lives one of the workwomen employed in making uniforms for the army.

Turning round the first corner, we entered a house in Rutland-terrace, and called on a woman who had worked regularly for the factory during the last eight years, and had lived in her present lodgings four years. We knew that this house was disinfected by the parish authorities last May, in consequence of a case of scarlet fever, yet both the landlady and the workwoman strenuously denied the presence of any fever during the whole time they had been in the house. On inquiring at the depôt we found that this woman had continued to work as usual during the time that scarlet fever was in her house, the authorities having no knowledge of the danger. This was, therefore, a good instance of the deception constantly practised.

In Hanover-street we found what the administration of the depôt would consider an ideal case. One of the foremen is the landlord of this house, and last April the five children of his first-floor lodger fell ill with scarlet fever, and three of them died. Fortunately, the foreman at once informed his employers, and was ordered to keep away from the works. The top-floor lodger now contracted the disease, and two of his children were ill; then, finally, the fever came down stairs and attacked one of the landlord's children. Thus there were eight cases of fever in that one house; and, though enjoying good health all the time, the landlord had to keep away from his work during seven weeks. Being a foreman and a time-worker, in receipt of good wages and a regular salary, he was allowed half-pay during his absence from duty. It was worth his while to content himself with this reduction of income rather than run the risk, by concealment, of losing a good place; but such a sacrifice cannot be expected from poor sempstresses who, on reporting the presence of disease, would get no compensation whatsoever. Thus, from Moreton-terrace, a poor woman came and worked at the factory every day while a child was lying at home sick with scarlet fever. She could not afford at this moment to lose her earnings. If the child had recovered, it is highly unlikely that anyone would have known that the clothes she made were probably contaminated, and she would have benefited by her earnings at the time when she most needed money. As it was, however, the child died, and, on applying for a certificate of death, the truth came out. This woman has been discharged for deceiving the authorities; but we consider that her conduct was more excusable under the distressing circumstances which afflicted her than the neglect of the administration in not attempting to disinfect the uniforms she handled.

To the east of the Army Clothing Depôt, and much nearer than the streets we have already mentioned, Aylesford-street and Pulford-street run almost parallel one with the other, and are more particularly the resort of the factory hands. These two streets are situated between St. George's-square and the gasworks erected behind Bessborough-place, and are undoubtedly about the most unwholesome spots in the whole neighbourhood. We know of five houses in Aylesford-street where fever broke out last year. In one of these houses three different families worked for the Depôt; in another there were two persons engaged in the same occupation. Fortunately, in both these instances the administration received warning, and the workpeople were kept away till they brought the sanitary inspector's certificate to prove that their premises had been disinfected.

In Pulford-street the houses are smaller and greatly overcrowded; they are often badly drained, and stand for the most part against the walls of the gas-factory. A great many of these houses do not possess back windows; a through draught is therefore unattainable; and the few windows that do exist are usually hermetically closed to keep out the stench from the gas-works. Let us take the history of one of these houses. On the 14th of July last three cases of scarlet fever occurred, and two of the patients were removed to the Stockwell Hospital. The third was a woman about to be confined. The infant caught the fever and died shortly after its birth. Two days later another lodger, living at the top of the house, lost one of her children by scarlet fever. On the 3rd of August two other cases occurred, and one of the patients was removed to the hospital. On the 6th two more lodgers fell ill with the same complaint. All this time a woman was residing in this house, with her five children, who earns her living either by going out as a charwoman or by making shirts for the Guards' Shirt Association. This is an institution organised for the purpose of giving employment to the widows of soldiers, and they produce about 80,000 shirts per annum for the army, which are kept in stock at the Army Clothing Depôt. When we called, great rolls of linen were lying on the dirty table of the foulest room of this ill-fated house, awaiting conversion into soldiers' shirts. The stench was unbearable, the dirt unspeakable; five little children, huddled together, lived in one room, and their grandmother often comes to help at the work and increase the overcrowding. Close at hand, in the washhouse, is the one closet used by all the lodgers. It is merely screened off by a partition which does not reach the ceiling. The top is, therefore, open, so that the sewer-gas, escaping from the untrapped closet, may travel freely throughout the house. On the outside of the partition is the sink; above and at the side of the sink and the closet an open cistern, without even a board to cover it, supplies both the closet-water and the drinking-water, and is so situated as to absorb the sewer-gas that passes over the water on its way into the house; so that if the inhabitants do not breathe all the foul air, they have ample opportunities of drinking what remains in solution. The closets and water-supply of the other houses we visited in this street are managed in the same abominable manner. The drains have also been known to overflow and saturate the whole basement, so that the chinks, crevices, and boards are thoroughly impregnated with fæcal matter. This house has been disinfected over and over again, and apparently to no purpose, but the filthy habits of some of its inhabitants and the nature of the water-supply may account for this failure. At the present moment a child living in the house has just recovered from an attack of measles followed by a suspicious amount of desquamation. The prevalence of fever in this house has so decimated or scattered the lodgers that we have been unable to ascertain precisely how many persons employed at the factory lived there; but we know that at least two among the many lodgers worked at the clothes worn by our soldiers.

The fever visited another house a few doors off similarly situated. The landlady told us that one of her lodgers worked for the depôt, that he was constantly communicating with her son while the child was suffering from scarlet fever, but that he knew nothing about it, and therefore should not be blamed for continuing to attend at the factory. The boy died of the fever.

Crossing the road, we entered a house whence a patient had been removed to the small-pox hospital on the 19th of September last. Here we found a woman busily at work making uniforms for the Royal Artillery. On examining her rent-book we learnt she had entered this house on the 5th of September; but, as she had worked without interruption since that date, she denied any knowledge of the presence of small-pox, and pretended she did not know that her fellow-lodger had been removed to the hospital. At the end of this same street we examined a house where there had been scarlet fever last July. A packer lives here, and he continued his work uninterruptedly at the factory the whole time—that is to say, he went from his fever den to fold and pack and send off uniforms to various regiments. This and some other cases mentioned were unknown to the authorities at the depôt till we ourselves pointed them out, and reference to the books has proved the accuracy of our information.

At a house opposite the packer's home there was scarlet fever last November, and two families, working for the depôt, live there. In answer to our inquiries, they stated that they had not left off work during the month in question. Altogether, we know of nine houses in Pulford-street where small-pox or scarlet fever broke out during the course of last year, and we do not for a moment profess to be acquainted with nearly all the cases that occurred. In many of the dwellings we visited there were, as we have already pointed out, several cases, and different families attacked in the course of the year. This fatal street consists of seventy-nine houses; and the director of the Army Clothing Depôt, to whose courtesy and valuable assistance we are indebted for many facilities in obtaining information, had a list drawn up of the number of persons in his employ living in Pulford-street. This list gives us the names of forty-four men and twenty-eight women, and does not, of course, include their children. We may, therefore, conclude that from sixty to seventy families, working in the manufacture of uniforms, live in this fever-stricken street. As these people invariably

intermingle one with another, running in and out of each other's lodgings, they one and all must be constantly contaminated with fever germs, even though the disease may exist but in one or two houses at a time.

Such are a few of the facts of the case before us, and they point, we think, conclusively, first, to the necessity of giving ample compensation to both piece-workers and time-workers who report the presence of fever in their homes; secondly, to the appointment of special sanitary inspectors to visit and keep constant watch over the dwellings of the work-people, particularly when they are allowed to take work to their lodgings.

HIGH COURT OF JUSTICE.

CHANCERY DIVISION.

(Before Vice-Chancellor Sir RICHARD MALINS.)

MARSH *v.* FARRANT.

This was an application for an order to commit the defendant to prison for contempt of Court in disregarding an injunction granted to restrain him from practising as a surgeon at Wandsworth. The defendant had entered into a contract with the plaintiff not to practise as a surgeon within three miles of Wandsworth; but, notwithstanding this agreement, he had practised and attended patients as an accoucheur. The defence was that the business of an accoucheur did not come within the terms of the agreement.

Mr. Higgins, Q.C., and Mr. Kingsford appeared in support of the application.

The VICE-CHANCELLOR said he was most distinctly of opinion that practising as an accoucheur was contrary to the terms of the agreement entered into by the defendant not to practise as a surgeon.

Mr. WILLIS appeared for the defendant, and said if that was his Lordship's opinion the defendant would apologise to the Court and would pay the costs of the proceedings.

The VICE-CHANCELLOR said in those circumstances he would not commit the defendant to prison.

Correspondence.

"Audi alteram partem."

CEREBRO-SPINAL FEVER.

To the Editor of THE LANCET.

SIR,—Within the last couple of months there have been admitted into the Dundee Infirmary a number of cases of the above disease.

A detailed account of the outbreak I hope to give on a future occasion. Meantime, I wish only to draw attention to its occurrence. I do so because it may occur elsewhere than in Dundee; and because, from its rarity and from its resemblance to other maladies, the real nature of the ailment may very readily be overlooked—especially in the homes of the poor. Moreover, it is of importance that no opportunity should be lost of studying the natural history of a disease which is so comparatively rare, and of which we know so little.

As it exists here at present it is undoubtedly contagious, affecting one member of a family after another; and bears, in many respects, so close a resemblance to typhus fever, that it may very easily be mistaken for it. Indeed, most of our cases have been sent in as typhus.

The onset of the disease is characterised by rigors, sickness, intense headache, and often pains in the neck, limbs, and trunk. The headache continues; fever is marked; the breathing is specially quick, and cerebral in character; the patient is restless, and has a look of great distress; the tongue is dry or furred; the bowels confined; the urine is high-coloured, deficient in chlorides, and sometimes contains a little albumen. There may or may not be an eruption on the skin. This, when it occurs, more often resembles the typhus rash than any other. It is distinguished from it by its earlier appearance, its generally lighter colour, its more varying character, and its tendency to fade or change, rather become more intense, as the malady advances. The cuticle, too, often desquamates freely in furfuraceous particles after cerebro-spinal fever.

The appearance of the patient is often very like that of a sufferer from typhus. Besides the above characters of the rash, the chief points by which cerebro-spinal may be distinguished from typhus fever are: that in the former there is more often sickness at the onset; the headache is more intense; the breathing is apt to be cerebral from the commencement of the attack; the intellect is clear, indeed often quite clear throughout the illness; there is less tendency to delirium and stupor; and the eyes are, as a rule, less suffused and injected.

The two maladies have so close a general resemblance that it must frequently be difficult, if not impossible, to make a satisfactory diagnosis in the badly lighted dwellings of many of the poor.

I hope that physicians practising in other localities will be on the outlook for what is always an interesting, and often a most alarming disease. It is new to our hospital records.

Your obedient servant,

T. J. MACLAGAN, M.D.,

Physician, Dundee Royal Infirmary; Examiner in Medicine to the University of Aberdeen.

THE "CRADLE" PESSARY.

To the Editor of THE LANCET.

SIR,—Dr. Bantock's criticism (THE LANCET, Feb. 1st) on the action of the "cradle" pessary, as depicted in the plate in my work to which he refers, is a just one. But I would remark that I have for some time past given up using the instrument in the particular way there delineated. At a meeting of the Obstetrical Society on April 5th, 1876, at which Dr. Bantock was present, I stated that I had for some time past been accustomed to use the instrument in a different manner.

Undoubtedly, in order to prevent flexion of the uterine body forwards, the pressure must be made at a point higher up than the middle of the uterus. This can readily be done by various modifications of the shape of the cradle pessary.

Yours obediently,

Berkeley-square, Feb. 3rd, 1870. GRAILY HEWITT.

REJECTIONS AT THE COLLEGE OF SURGEONS.

To the Editor of THE LANCET.

SIR,—May I be allowed through the medium of your columns to suggest a reason for the large number of rejections, nearly 40 per cent., at the last examination in anatomy and physiology of the Royal College of Surgeons. I feel sure that this objectionable result is partially due to the unfairness of the written examination, in which candidates, after two sessions' work, are only asked four questions in anatomy, and two in physiology, which makes it quite possible for a student who is really well up in his work to do a bad paper, especially in physiology; whereas if two papers were given with six questions on either subject, students would have a better chance of displaying, and examiners of judging, their real knowledge.

Yours, &c.,

DELTOID.

PARLIAMENTARY PROCEEDINGS.

HOUSE OF COMMONS.

Thursday, January 31st.

HYDROPHOBIA.

In answer to Lord C. Hamilton,

The CHANCELLOR of the EXCHEQUER stated that the attention of everyone had been directed to the increase of hydrophobia, and to the number of stray and dangerous dogs, and that the Government were considering the subject with a view to legislation.

Tuesday, February 5th.

MEDICAL OFFICERS OF HEALTH.

Colonel NAGHTEN asked the President of the Local Government Board whether he had considered the desira-

bility, with a view to the better carrying out of the Public Health Act, especially with regard to the suppression of nuisances, of making it compulsory to appoint the medical officers of health in all cases for unions or other large areas, instead of, as is now sometimes the case, for parishes only.

Mr. SCLATER-BOOTH said he did not intend to propose any change in the law on that subject; but the Local Government Board had always encouraged a combination of local authorities in respect to the appointment of these officers, and it would continue to do so.

Medical News.

ROYAL COLLEGE OF PHYSICIANS OF LONDON.—The following gentlemen, having passed the required examination, have been admitted Members of the College:—

Cottle, Ernest Wyndham, M.B. Oxford, Savile-row.
Duncan, James Matthews, M.D. Aberd., Brook-street.

ARMY MEDICAL SERVICE.—The following is a list of candidates who have been successful at both the London and Netley examinations, having passed through a course of instruction at the Army Medical School, Netley:—

	Marks.		Marks.
Keays, W.	4900	McLaughlin, H. J.	3330
Young, P. G.	4563	Power, E. R.	3316
Crofts, F. W.	4273	Donovan, H. L.	3239
Beamish, R. T.	3956	Leader, N.	3156
Parker, W. A.	3900	Tidbury, J.	2913
Green, A. P.	3869	Lyle, A. A.	2842
Lumly, A. R.	3865	Clinch, J. V.	2784
Anderson, J.	3865	Conolly, J. V.	2742
Pedlow, J.	3850	Charlton, H. A. H.	2542
Routh, J. J.	3350	Barrington, H. E. W.	2490
Mulrenan, J.	3348	O'Neill, S. L.	2486
Grier, H.	3335	Quarry, C.	2454

INDIAN MEDICAL SERVICE.—The following is a list of candidates who have been successful at both the London and Netley examinations, having passed through a course of instruction at the Army Medical School, Netley:—

	Marks.		Marks.
*Thomson, S. J.	5008	Tully, E.	4050
Campbell, R. N.	5000	Davidson, D. C.	3995
Brander, E. S.	4972	Bennett, C. H.	3942
Manser, R.	4835	Peacocke, J. C. H.	3890
Chatterjie, F. C.	4719	Nariman, K. S.	3875
Emerson, G. A.	4565	Sargent, A. F.	3697
Adey, H.	4500	Thornhill, W. H.	3615
Koyaji, B. N.	4290	Robinson, R. H.	3486
Street, A. W. F.	4180	Reporter, M. E.	3327
Jervis, H. P.	4009		

* Gained the Herbert Prize and Martin Memorial Medal.

NAVAL MEDICAL SERVICE.—The following is a list of candidates who have been successful at both the London and Netley examinations, having passed through a course of instruction at the Army Medical School, Netley:—

	Marks.		Marks.
Porter, J.	4070	Charlton, G. R. D.	3445
James, C.	4015	Bell, G. W.	3359
Loane, Th.	3775	Jeans, F. A.	3160
M'Leod, A. W.	3620	Reid, A. W. W.	3145
Triggs, J. B.	3544		

APOTHECARIES' HALL.—The following gentlemen passed their examination in the Science and Practice of Medicine, and received certificates to practise, on Jan. 31st:—

Lockwood, Charles Barrett, Claremont-square.
Miller, James Duff, Brougham-place, Edinburgh.
Norton, Thomas Chalmers, King's-square, Bristol.
Orr, Rowland Beatty, Toronto, Canada.

The following gentleman also passed the Primary Professional Examination:—

Pierson, Alfred Henry, Guy's Hospital.

At the Preliminary Examination in Arts held at the Hall on Jan. 25th and 26th, 87 candidates presented themselves, of whom 22 were rejected, and the following 65 passed and received certificates of proficiency in General Education:—

FIRST CLASS (in order of merit).—1st: Richard Morris Lewis and Rolla Edward Rouse. 3rd: John Griffin and Alice K. Marston. 5th: A. G. Laidler and Julia C. Swagman. 7th: E. T. Carlyon, J. R. Cory, O. D. Mackay, F. G. Walton, and C. J. Weller.

SECOND CLASS (in alphabetical order).—E. H. M. Alford, C. L. Ashby, V. W. Baker, Elizabeth Bellby, A. J. Benbow, C. C. Browne, N. Bruce, H. J. L. Bullen, C. P. Bullock, Lucy E. Cradock, T. W. D'Aubney, C. T. Fisher, G. H. Fink, E. O. Gilkes, N. G. Gilkes, G. P. Godfrey, G. B. Gorrick, G. B. Guthrie, W. J. Haddock, P. R. Harris, I. Hartley, G. O. Hodgson, J. Houle, J. M. Howe, W. Hull, J. E. E. Jones, J. R. Keele, J. L. W. Kitching, J. E. London, F. W. M'Donogh, J. E. May, F. M. Nickoll, R. F. Nixon, W. T. Okell, G. V. Perez, H. E. Philbrick, T. H. Pott, Agnes Pritchard, H. G. Read, A. E. Rock, H. T. Rudge, G. L. Rugg, R. H. Russell, R. H. Short, W. A. W Smith, W. D. Stevenson, B. H. Stevens, M. Thane, P. E. Todd, J. G. Uppleby, H. W. S. Verity, G. B. Wood, S. Wyborn.

A DOCTOR'S COUNTER-IRRITANT.—The prescribing chemist.—*Punch*.

DR. EDWARD JONES, Medical Officer of Health, Dolgelly and Barmouth, has been placed upon the Commission of the Peace for the County of Merioneth.

AT the College of Physicians, Ireland, the first of the series of scientific lectures for the present year was delivered on last Monday by Dr. Walter G. Smith, "On the Principles of Electro-Therapeutics."

THE Corporation of Swansea have given plenary powers to a committee to acquire certain property for carrying out improvements under the Artisans' Dwellings Improvement Act. The first section of the scheme will cost £25,000,

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—Professor Parker, F.R.S., will commence his course of nine lectures on "The Morphology of the Batrachia" on Monday next. These lectures will be delivered in the theatre of the College on each Monday, Wednesday, and Friday, at four o'clock P.M.

Medical Appointments.

BAXTER, R., M.B., C.M., has been appointed Assistant House-Surgeon to the Darlington Hospital and Dispensary, vice Sawyer, resigned.

BELLAMY, E., F.R.C.S., has been appointed Surgeon to the Charing-cross Hospital.

COOPER, J. N., L.K.Q.C.P.I. & L.M., M.R.C.S.E., L.S.A.L., has been appointed Medical Officer of Health for the Hyde and Newton-Moor Sub-district of the Stockport Rural Sanitary District, vice Beecroft, resigned.

CREW, J., L.R.C.P.L., M.R.C.S.E., L.S.A.L., has been appointed Medical Officer for the C District of the Thrapstone Union, vice Starling, deceased.

CURTIS, A., L.R.C.P.L., M.R.C.S.E., has been appointed Medical Officer and Public Vaccinator for the No. 2 District of the Alton Union, and Medical Officer of Health for the No. 2 Sub-district of the Alton Rural Sanitary District, vice Wilson, resigned.

ELSOM, F. J., L.R.C.P.Ed. & L.M., M.R.C.S.E., has been appointed Medical Officer and Public Vaccinator for the Whitwell District of the Worksop Union, vice Walker, resigned.

EXELL, E., L.R.C.P.Ed., M.R.C.S.E., has been reappointed Medical Officer of Health for the Idle Urban Sanitary District, Yorkshire, at £40 per annum for three years.

LESLIE, E. J. L., L.R.C.P.Ed., has been appointed Certifying Factory Surgeon for Alton, vice Wilson, resigned.

LIVINGSTON, J., M.D., C.M., F.F.P.S.G., has been appointed Medical Officer for No. 1 District and the Workhouse of the Barnet Union, and Medical Officer to the Loyal Wrotham Lodge of Odd Fellows (Manchester Unity), vice Godson, resigned.

MARSH, E. A., L.R.C.P.Ed., L.R.C.S.Ed., L.S.A.L., has been appointed House-Surgeon to the Torbay Hospital and Provident Dispensary, Torquay, vice Richardson.

MARTIN, R., M.D., has been appointed Senior House-Surgeon to the Ardwick and Ancoats Dispensary and Ancoats Hospital, Manchester, vice White, resigned.

O'DONOVAN, T. P., M.R.C.S.E., has been appointed Certifying Factory Surgeon for the District of Lydney.

PATTINSON, H. B., M.R.C.S.E., L.S.A.L., has been appointed Assistant Medical Officer to the Ipswich Lunatic Asylum, at £100 per annum, board, furnished apartments, &c.

PAUL, F. T., L.R.C.P.L., M.R.C.S.E., L.S.A.L., has been appointed Pathologist at the Liverpool Royal Infirmary, vice Parker, appointed Assistant-Surgeon.

REYNOLDS, J. R., M.D., has been appointed Physician to the Household in Ordinary to Her Majesty, vice Hawkins, deceased.

RICHARDSON, Dr. J. B., has been appointed a Physician to the Torbay Hospital and Provident Dispensary, Torquay, vice Macreight, resigned.

RUSSELL, T. O'Dwyer, L.K.Q.C.P.I. & L.M., L.R.C.S.I., has been appointed Resident Medical Officer to the Limerick Union Workhouse, at £150 per annum, rations, and apartments, vice O'Kelly, resigned.

TAAFFE, R. P. B., M.D., F.R.C.S.E., has been appointed Honorary Consulting Physician to the Sussex and Brighton Infirmary for Diseases of the Eye.

THOMPSON, E. S., M.D., has been appointed Medical Officer to the Equity and Law Life Assurance Society, vice Cotton, deceased.

WALKER, T. H., L.R.C.P.Ed., L.R.C.S.Ed., has been reappointed Medical Officer of Health for the Longtown Rural Sanitary District, at £30 for one year.

WINKFIELD, A., F.R.C.S.E., has been appointed a Surgeon to the Radcliffe Infirmary, Oxford, vice Hussey.

WISE, N. V., L.K.Q.C.P.I., L.R.C.S.I., has been appointed Medical Officer for the No. 2 District of the Westbury and Whorwellsdown Union, and for the No. 2 District of the Melksham Union, vice Miller, resigned.

YOUNG, W. E., L.R.C.P.Ed., L.R.C.S.Ed., has been appointed Medical Officer and Public Vaccinator for the Caversham District of the Henley Union, vice Carter, resigned.

Births, Marriages, and Deaths.

BIRTHS.

BATCHELOR.—On the 28th October, at Dunedin, New Zealand, the wife of Ferdinand C. Batchelor, L.R.C.P.Ed., of a daughter.

BREND.—On the 29th ult., at Argyll-road, Kensington, the wife of William Brend, M.R.C.S.E., of a son.

FINEMORE.—On the 22nd ult., at Malvern Villas, South Hackney, the wife of James H. Finemore, L.R.C.P.Ed., of a son.

MEIKLEJOHN.—On the 31st ult., at Weymouth, the wife of John W. S. Meiklejohn, M.D., Fleet-Surgeon, H.M.S. *Warrior*, of a son.

MARRIAGES.

MACRAE—GRAHAM.—On the 31st ult., at Glasgow, John Macrae, M.D., to Elizabeth, daughter of the late Rev. James Graham.

RAHILLY—BISDEE.—On the 2nd inst., at St. Mary's, Hutton, Somerset, by the Rev. G. H. Gibbs, B.A., Rector, John Roche Rahilly, Staff-Surgeon (late Royal Scots Fusiliers), Army Medical Department, to Sarah (Dollie), only daughter of A. H. Bisdee, Esq., of The Court, Hutton, Weston-super-Mare, and Sandhill, Tasmania. No cards.

DEATHS.

BROWN.—On the 2nd inst., at Wooler, Northumberland, Joseph Brown, L.R.C.P.Ed., aged 66.

COOPER.—On the 26th ult., at Tombland, Norwich, Emanuel Cooper, L.S.A.L., aged 75.

FRY.—On the 29th ult., at Maidstone, Frederick Fry, F.R.C.S.E., aged 68.

GORDON.—On the 30th December, at Barbadoes, Alexander Gordon, M.B., C.M., L.R.C.S.Ed.

JONES.—On the 4th inst., at Blackfriars-road, Frederick Charles Jones, M.D., aged 61.

PELLY.—On the 30th ult., at Eyrecourt, co. Galway, James Pelly, L.R.C.S.I.

SHEEHAN.—At Buttevant, co. Cork, James P. Sheehan, M.D.

TAYLER.—On the 2nd inst., at Trowbridge, Christopher Tayler, M.R.C.S.E., aged 62.

WILSON.—On the 29th ult., at Stretford-road, Manchester, Alexander Wilson, M.D., aged 57.

[N.B.—*A fee of 5s. is charged for the insertion of Notices of Births, Marriages, and Deaths.*]

Notes, Short Comments, and Answers to Correspondents.

PROVISION FOR INFECTIOUS DISEASES AT BIRKENHEAD.

ON February 4th a deputation of the Birkenhead guardians waited upon the Mayor at the Municipal Offices to submit a report from Dr. Mouat, medical inspector for Poor-law purposes, in reference to a proposal to erect infectious wards near the Union Hospital. It appeared that during the prevalence of small-pox in 1877 this disease had spread from the infectious wards to the other wards of the hospital, and two patients who had thus contracted small-pox died of it. As this was obviously due to the part of the hospital hitherto used for infectious cases being imperfectly isolated, the guardians had proposed to erect a separate building for the reception of the sick from infectious disease, and with this view had sent in plans for the consideration of the Local Government Board. The number of patients for which accommodation was contemplated was forty. Dr. Mouat's report pointed out that so large a building would not in any circumstances be needed for the workhouse, and that to make provision for all the needs of the union was opposed to the present policy of the Local Government Board, who considered it the duty of the sanitary authority to provide for the isolation and treatment of infectious fevers in all classes for the general protection of the community. All paupers could be treated in hospitals provided by sanitary authorities, and payment made by the guardians. On the other hand, non-pauper cases could not rightly be placed in buildings erected by the guardians. The rapid stamping-out of infectious diseases required immediate and complete isolation, conditions, from administrative and other reasons, difficult to secure in premises in any way connected with a workhouse. Under these circumstances, the inspector recommended the guardians to defer the consideration of the proposed erection within the workhouse precincts until the bearings of the question in its relation to the general community had been considered and determined in communication with the Town Council of Birkenhead. The Mayor requested that the Town Clerk might be furnished with a copy of Dr. Mouat's report, and promised the matter should have the early attention of the Council.

"WASHABLE" RESPIRATOR.

To the Editor of THE LANCET.

SIR,—In thanking you for your notice of my respirator, allow me to point out an error which is likely to do me an injury if not contradicted—viz., Messrs. Lynch and Co. are not the manufacturers of my "washable" respirators, but are my wholesale and export agents.

Your obedient servant,
HEWLEY CHAS. WORDSWORTH.

Sloane-street, Knightsbridge, Feb. 1st, 1878.

STRICTURE OF THE URETHRA AMONG SOLDIERS.

DURING the year 1876, 33 cases of stricture of the urethra were treated in Netley Hospital, all the men being admitted from foreign stations. Of this number, 27 had their origin in gonorrhœa, 3 in gonorrhœa and injury combined, 1 in local injury, and in 2 cases the patients could not account for the affection. Most of the men had been treated with strong injections, and in two cases there was fistula in perinæo. In 31 cases gradual dilatation with metal or elastic instruments was carried out with success, two cases being treated with Holt's forcible dilator. In one case division of a stricture at the external meatus was found necessary, and in another, where there was complete retention of urine, puncture of the bladder per rectum was performed, which was followed by relief and cure of stricture.

Subscriber, (Bound's-green.)—Hansard's, Great Queen-street, Lincoln's-inn.

PUERPERAL PYREXIA.

To the Editor of THE LANCET.

SIR,—I am strongly of opinion that Dr. Glover, in his Note on Puerperal Pyrexia in your last issue, erroneously attributes his success to the special line of treatment adopted. Cases such as he describes recover with such rapidity or certainty under any reasonable treatment that no special merit can be claimed for any measures beyond washing out the vagina, opening the bowels, and giving the patient sufficient sleep.

I have again and again pushed quinine to chinchonism in the worst forms of puerperal fever and in every variety of puerperal septicæmia; and though the temperature may fall one or two degrees in twenty or thirty hours after about half a drachm has been taken, yet I have never obtained a condition of apyrexia by its use.

The following case might be adduced in support of the curative power of quinine, if we were ready to accept the *post hoc propter hoc* argument.

Mrs. F——, delivered midday on a Thursday, went on favourably until Saturday. On the morning of that day the uterus was large, but firm; lochia rather fetid; pulse 96; temperature 98·6°. She had shivering in the afternoon and evening.

Sunday.—11 A.M.: Pulse 152; temperature 104·8°; milk and lochia not suppressed; no fetor; uterus large; left cornu tender; os patent; cervix quite movable; abdomen tympanitic.—9 P.M.: Pulse 144; temperature 105·2°; abdomen tender and tympanitic. A few hours later the bowels acted rather freely. She slept well during the night, perspired freely, and on Monday morning her temperature was only 99·5°, though the pulse was 120. Nearly all the tenderness and tympanites had disappeared, and the lochia were healthy. On the Sunday I had ordered five grains of quinine every four hours; but the same result would, I believe, have happened without it.

I have seen so many cases at different periods after labour resembling this in the rapid subsidence of symptoms under various treatments that I am now disposed to regard the result as to a large extent independent of the general measures taken in each instance. In one case I found a temperature of 106° on the eighth day, although most favourable progress had been made up to this time. I prescribed five grains of quinine every four hours in combination with Dover's powder. Next morning the temperature was normal. Wonderful effect; but not of quinine! The chemist had never seen five grains of quinine prescribed before, and refused to dispense it. My poor patient was spared a bitter dose, and I the error of attributing to my treatment the brilliant result, which was nature's own work. I have seen recurrent attacks of severe pyrexia in the same patient within fourteen days of labour subside equally well under widely different treatment, or when left alone. I could multiply such instances, showing that cases of "puerperal pyrexia" tend to resolve favourably; and could produce others showing that in certain types of "puerperal fever" patients will die in spite of quinine, opium, turpentine, poultices, &c.

Although I thus limit my faith in internal remedies (but not discarding them), I have the greatest confidence in local measures, and believe that in this direction will some day be found a successful treatment for puerperal fever, even in its worst forms, if recognised early enough.

To economise your space I avoid further details and other points in Dr. Glover's note from which I might dissent—e. g., the assumption of a local lesion in puerperal pyrexia.

I remain, Sir, yours truly,
ED. GEO. WHITTLE, F.R.C.S.

Old Steyne, Brighton, Feb. 4th, 1878.

Scientia.—An English translation of Professor Virchow's address on "The Liberty of Science in the Modern State," delivered before the Association of German Naturalists at Munich, was published in *Nature* for Nov. 22nd, Nov. 29th, and Dec. 6th, 1877.

Mr. Mitchell.—We are not aware of any way in which the wish can be carried out, except by private arrangement.

Lex.—Yes, under the Apothecaries Act.

Post-partum.—The paper shall be inserted as early as circumstances will permit.

THE TELEPHONE.

To the Editor of THE LANCET.

SIR,—The telephone is capable of revealing minute variations of electro-motive force. Might I suggest (not having seen the suggestion elsewhere) that it might be a good means of demonstrating and studying the sound produced by a muscle during contraction, the negative variation, &c. The electrodes might be applied directly to the muscle, one telephone only being used. Has the telephone ever been tried in auscultation, and would it offer any advantages over the stethoscope?

Your obedient servant,
Hornsey, Feb. 6th, 1878. A. B. M.

To the Editor of THE LANCET.

SIR,—If not already in use, permit me to suggest the superiority of the telephone over the ordinary stethoscope in cases where the latter instrument is required.

Yours obediently,
Cheyne-walk, S.W., Jan. 29th, 1878. F. H. SANDERS.

TRAINING OF MIDWIVES.

THE Midwives' Home, connected with Sir P. Dun's Hospital, Dublin, receive a limited number of nurses to be trained as midwives, the training of each lasting six months. One of the head nurses resides in the Home, and is responsible for the good conduct of the nurses, who are required to attend the lectures of the King's Professor of Midwifery, which are illustrated by the same diagrams and models as are used in the School of Physic of Trinity College. The nurses in training attend patients in the neighbourhood of the hospital, under the instruction of the head midwives. The advantages of this arrangement are great, and for educating midwives for employment in the various unions throughout Ireland the system seems a good one.

Mr. Wm. Stewart's paper shall be published in an early number.

HYDROPHOBIA.

To the Editor of THE LANCET.

SIR,—Having noticed the present excitement in England about hydrophobia, I have thought it worth while to mention to you and your readers the following facts bearing on the subject.

Many years ago, whilst travelling in Southern China, I remember being told by a French priest that the native doctors of Cochin-China are in the habit of treating successfully the cases of hydrophobia, prevalent there, by keeping their patients delirious during twenty-four hours or more by administering successive doses of a decoction of the leaves of the purple stramonium. Some years afterwards, in Kandy, Ceylon, I was assured by the assistant colonial surgeon, a burgher educated at Calcutta, that a child of his own, of about four years of age, was once bitten by a hydrophobic cat; that some weeks thereafter, the usual well-marked symptoms of hydrophobia having set in, he, knowing no cure for the fell disease, sent for a native Singalese doctor, who had the reputation of being able to cure such cases; that this man gave the child some vegetable decoction, the nature of which he declined to reveal, and which kept the child delirious for about a day and a night; and that when this delirium subsided, the symptoms had disappeared, and the little patient was, and remained, quite cured. He thought this might be stramonium. So do I. The coincidence is curious. Whether it is known to European physicians that stramonium has ever been employed thus I know not. If not, it is surely worth a trial. The stramonium grows wild in Ceylon, and its seeds are often used by Singalese thieves to hocus their victims. I was once called to attend a gentleman coffee-planter and his wife, who had both been poisoned by their cook on the night after the planter had brought out from Kandy some hundreds of rupees to pay his men. The poison, probably the powdered berries, was administered in muligatawny soup. When I arrived, the gentleman was perfectly delirious, the lady insensible, although both had been freely vomited by mustard. The delirium was very peculiar, and lasted in both cases for many hours; they went about wiping the furniture, seemed to see dust on everything, and were very quiet, tractable, and abnormally ceremonious and polite. It was utterly unlike alcoholism, and could not be confounded therewith.

The case of the child above mentioned, if authentic, seems to put out of court the absurd theory that hydrophobia is due to fear and imagination only. A friend of mine, a young and fortunate merchant, and his servant were both bitten by an undoubtedly mad pet dog in Colombo. Both were treated at once. The native remained well. His master never had any symptoms of hydrophobia; but soon after blew his brains out from apprehension, yet his excessive fear produced no symptoms at all.

The *Pall Mall Budget* mentions the case of a boy who died of hydrophobia after being bitten by a dog which did not go mad at all, as though it were a proof of the imagination theory. Not at all; the boy may on some previous occasion, perhaps years before, have been bitten or licked on a sore by a mad dog, and the fear caused by the second bite may have been the exciting cause of the latent disease.

I myself once treated a native of Travancore, who died with all the symptoms of hydrophobia. Amongst other heroic remedies, I remember that I blistered him over the spine, removed the epidermis, and powdered the raw surface with morphia. I could get no history of any bite at all in this case; yet this case is no proof of the imagination theory, because careless men may be easily licked, if not slightly grazed or bitten, by a dog sickening with hydrophobia, and not remember it through a year or even a month, and, if licked on a scratch or open sore, would be just as effectually poisoned as if bitten ever so deeply.

Dr. Watson gives an authenticated case of the disease in a coachman, whose skin, although bruised by striking it against the dog's tooth, had not been broken. I have generally abrasions on my hands, and my dogs are frequently licking them as they come up beside me. If one got hydrophobia I should have it, and yet declare I had never been bitten. No, Sir, the imagination theory will not work.

I am, Sir, yours respectfully,

A. W. BAYLIS, M.R.C.S.

Clear Lake, Lake Co., California, U.S.A., Dec. 10th, 1877.

To the Editor of THE LANCET.

SIR,—Being much interested in all relating to the dreadful and as yet incurable disease, generally known by the name of hydrophobia, I venture to address you on the subject. It has been my fortune or misfortune to have attended four well-marked cases, ending, as such always do, fatally; and, though I have subscribed to your journal for eight years, I do not remember seeing the disease so much noticed as at present—the result, I presume, of cases occurring more frequently than hitherto in this country. A few remarks from my experience of the disease may perhaps not be thought out of place. The cases occurred in British Guiana, where the disease, unknown there prior to 1872, was supposed to have been imported by canine travellers from Barbadoes, distant only thirty-six hours by steam. My attention has been drawn to the subject more especially by the letter in your issue of the 26th inst. from Dr. James Adams, with whose remarks I am inclined to agree. As to the fear of water, it is often the occurrence of the first fearful spasm caused by the attempted act of deglutition of fluid that the phobia or horror of again attempting it arises. I have seen a patient by a great effort of will bring a glass or cup of water as far as his lips, and then, with a cry and a leap, dash it away. In one case, that of an African adult, freed from a "slaver" when a boy, the symptoms were marked and most interesting. He was bitten by a watch-dog during Christmas week, 1871, and was seized with hydrophobia on December 22nd, 1872, whilst bathing in a canal. The poor man attributed his sufferings to "Obeahism," or the influence of some malevolent spirit. He died on December 25th, 1873, though, strange to relate, he could swallow ale or porter with only a slight spasm, and very evident subsequent relief, which, of course, was only temporary. Though he had bitten three attendants a few hours previously, yet he imbibed a pint of porter with a great sigh of satisfaction half an hour before he died. Remembering this in another case, that of an intelligent Portuguese man, bitten by a dog, known to have been mad, in October, 1875, and who died a month after of hydrophobia after three days' illness, I thought I would try the effect of the tincture of hop. I gave him half an ounce of the tinctura lupuli every two hours. It certainly relieved him, and kept the spasms at bay while its effects lasted. However, its efficacy wore off after a time, though the man, who expressed his conviction he was bound to die, took the medicine, as he himself admitted the relief felt. As yet we cannot cure this disease; but if we can mitigate the great mental as well as hopeless bodily suffering of those so afflicted, surely we are a step further on the way. In another case I found that a continuous rubbing of the extract of belladonna along the spine was much appreciated.

Space will not permit much more; but I may add that the paralysis of the nerves supplying the muscles of deglutition, as well as the sense of oppression in the chest from the constrained and irregular action of the heart, seem to point to the eighth pair as the portion of the nervous system chiefly implicated in the disease.

Your obedient servant,

HENRY DALTON, M.D., C.M. Edin.,
B. Guiana Medical Service.

Hartwith, Ripley, Yorkshire, Jan. 29th, 1878.

THE OPIUM TRAFFIC.

ACCORDING to a recently issued Consular Report, opium smoking and eating is greatly increasing in China, and to an extent which hinders any reduction of the import of the Indian drug. Wealthy people are found to habitually prefer the foreign article, the poorer classes remaining content with their native produce. A good deal of adulteration and "doctoring" appears to be used in the opium traffic. In Shanghai the native drug is 85 per cent. cheaper than Indian opium.

Mr. A. J. Pepper is thanked.

AN APPEAL.

To the Editor of THE LANCET.

SIR,—On behalf of the friends of a distressed medical man, I have to thank those who have so kindly responded to my appeal. Lay subscriptions I have acknowledged elsewhere. At the same time I shall feel obliged for further assistance, which is greatly needed and deserved.

Dr. G. Shann	£2	2	0	T. W.	£1	1	0
Dr. C. Coates	2	2	0	Mr. T. M. Beaumont, F.R.C.S.	1	0	0
Dr. A. Clark	2	2	0				
Dr. C. Allbutt	1	1	0	Dr. Wm. Stewart	0	10	0
Dr. G. B. T. Walters	1	1	0	Dr. J. Baker	0	10	0

I am, Sir, yours faithfully,

Easingwold, near York, Feb. 5th, 1878. JOHN J. EBERLE.

O. E., B.M., and *M.D.*, bring under our notice the grievance of being required to give evidence before magistrates in cases of assault, and then being refused fees for their evidence and loss of time. In "O. E., B.M.'s" case the refusal was on the ground "that the prisoner was not sent for trial, but only committed to prison for a month." This explanation must have been on the principle that a bad excuse is better than none. The patient was committed almost solely on the medical evidence. The injustice of such behaviour is palpable. The fee for attendance before a magistrate is 10*s.* 6*d.*; at Petty Sessions, £1 1*s.* Our correspondents should insist on being paid. If payment is refused, medical men will require to have an understanding about giving evidence before being sworn.

ANTIPERIODICS.

To the Editor of THE LANCET.

SIR,—The appeal made by Mr. W. E. Saunders, A.M.D., for the trial of nitrite of amyl as an antiperiodic, to which he refers in THE LANCET of Jan. 5th, may have met with more success in India than he is aware of, possibly with greater success than the treatment; for it was the remedy that, in my hands, proved "futile." I gave it a fair trial in a considerable number of cases at Delhi in 1876, at a time when malarious fevers were prevalent, and found that, though it appeared occasionally, and only occasionally, to bring on the sweating stage rapidly, and thus to cut short a single paroxysm of ague, it did not seem in any case to prevent the recurrence of the intermittent, or to act as an antiperiodic at all. The fifteen grains of quinine or more, which he notes as having given after the use of the nitrite of amyl inhalation, would help to explain its success in his cases. The remedy has even yet to be discovered which will "act more surely and with greater effect" than quinine, the expense of which is its chief drawback, although the scarcity which Mr. Saunders mentions could have been easily remedied if it occurred in a military hospital in India. His preliminary observations as to the unsatisfactory results of quinine treatment seem scarcely to accord with his remark that "there is no medicine so useful in preventing chills and in removing that toxic state which results after repeated attacks of ague." His comparison of the "cold stage of ague with the collapse stage of cholera and other diseases in part resembling it," if not new, has simplicity to recommend it, although, it is to be feared, not of much value in practice.

Your obedient servant,

H. F. PATERSON, M.D.,
Surgeon-Major, A.M.D.

Perth, Jan. 30th, 1878.

A WORKING WOMAN'S LYING-IN SOCIETY.

THE working classes of Mulhouse have largely contributed by their industry towards the renown and commercial prosperity of this manufacturing centre. On the other hand, they have enjoyed the advantages derived from numerous institutions wisely conceived, ably administered, and all tending to the material comforts of their existence. Among these organisations, the Working Women's Lying-in Society has proved most useful to its associates. There are upwards of two thousand women and girls enrolled in this Society. The subscription is fixed at twenty centimes, or twopence, for the women, and the employers pay the same sum into the common fund for each member in their employ. During the six weeks of convalescence after confinement, each member receives eight shillings per week, medical attendance, and every necessary medicament. The result has been a reduction of five per cent. in the rate of mortality from childbirth among members of the Society, as compared with the number of deaths that occurred in the town and neighbourhood. There is also a notable reduction in the mortality of the infants during the first years of their existence whose mothers have had the prudence to enrol themselves in this Association. The liberality of the employers in giving a sum equal to the subscription the workwomen themselves pay is highly commendable, and characteristic of the enlightened spirit prevalent in the town which boasts of such men as Gustave Dolfus in their lists of distinguished citizens.

Mr. Edwin Morgan.—The perils of practice by midwives are very great, and they are unavoidable.

CASE OF ASCITES, TAPPED FORTY-TWO TIMES.

To the Editor of THE LANCET.

SIR,—I offer for insertion in your columns the following account of an unusual case which has occurred in my practice.

Mrs. A. B——, aged forty-six years, has had five children, all of them, except the last, being born without any complication. The last, born in September, 1872, was a hand presentation, and was dead at birth. The mother never experienced anything unusual in her condition till carrying her last child, during which time, from the commencement of pregnancy, she was the subject of at first uneasiness, and afterwards of positive pain, in the left hypochondriac region, and this was always increased in severity by the recumbent posture, but especially towards the full period of gestation, when she had frequently to walk about the room all night, and sit in turns. She first noticed a swelling from dropsical fluid about one month after the birth of the child; the fluid resisted all treatment, and in the following May, eight months after her last confinement, the abdomen was tapped for the first time, yielding five or six quarts. Another operation was performed four months after, producing a quart more fluid than the previous one, and subsequently, for a period of two years, the tapping was repeated at intervals of every three months, the accumulated fluid measuring now about eleven quarts on each occasion. The operation has now to be done every four weeks, the result being twelve quarts each time. The pain now complained of is in the hepatic region, and it is continuous, but always relieved by tapping. After the exit of the fluid, the liver, or some tumour attached to it, can be plainly felt as one uninterrupted ridge, extending from the hepatic region as far down as the crest of the right ilium; it is very loose, and can be moved from side to side of the abdomen, though rough handling gives pain. Another operation will have to be performed in the course of another fortnight, about the first week in February, and should any of my professional brethren be desirous of examining the case on that occasion I shall be pleased to give them the opportunity.

I will make no comments upon this unusual condition of matters; but I have deemed it sufficiently interesting to bring before your readers at this time, and I may, if permitted, afterwards give them the pathological conditions of the parts when the end shall come.

I may add that the patient is always well enough to be up and moving about the house the day after the operation.

I remain, Sir, yours &c.,

Morecambe, Jan. 18th, 1878. J. FARRAR, L.R.C.P. Ed., &c.

Mr. G. F. Farrand.—Sir J. Lomax Bardsley died in July, 1876, at Greenheys, Manchester, we believe. A short sketch of his career will be found in our number of July 22nd of that year.

VENESECTION.

To the Editor of THE LANCET.

SIR,—As the subject of venesection is again attracting attention, a case that has recently come under my own observation may be of interest, and for the accuracy of the main facts, as related to me, I can vouch.

An English lady engaged a fine healthy Welshwoman to accompany her to Spain, where, with but little warning, she was seized with violent hæmatemesis, so profuse as to utterly exhaust and blanch her. The Spanish medico, on his arrival some hours after, insisted upon abstracting as much blood as would flow from the arm, although hæmorrhage had entirely ceased, and covered the whole thorax and abdomen with an open blister, while he denied all kinds of nourishment, permitting only small quantities of water. After some days he announced that one lung was entirely gone, and that she was suffering from acute phthisis. The patient had never a symptom of a cough, and after the one violent expulsion of dark, clotted, grumous blood, never expelled a trace of bloody fluid either by cough or vomit. When the doctor, about the tenth day of the illness, made this announcement, the house was deserted by all Spanish servants, as though the plague had attacked the inmates, believing, as they do, phthisis to be equally infectious. It is not to be wondered at that the patient died, and since then I have heard of another case of pleurodynia in a fine, newly-married man, who sank under repeated venesections in the same locality.

Yours &c.,

RICHD. NEALE, M.D. Lond.

Boundary-road, St. John's-wood, Jan. 1878.

HOW CONTAGIOUS DISORDERS ARE SPREAD.

AT a meeting of the guardians of the South Dublin Union last week, a communication was received from Dr. Neary, one of the dispensary medical officers, stating that he had been attending a small-pox patient, whose parents refused to allow him to be removed to the hospital. A warrant was obtained, but the father used such violence towards the constable and relieving officer that they were unable to enforce the order. The penalty for resisting the execution of a magistrate's order for the removal of a sick person to hospital is £10, and the guardians very properly decided to prosecute the offender as a warning to others.

IS UMBILICATION OF THE VESICLE A DIAGNOSTIC SIGN OF SMALL-POX?

To the Editor of THE LANCET.

SIR,—Now that we are still in the midst of an epidemic of small-pox, we are all specially anxious to diagnose correctly and quickly in all its stages a case of variola, both for the interest of our patient and also for our own reputation. I find Aitken, at page 302, vol. i., in his summary of the distinctions between varicella and variola, states, referring to the small-pox vesicle, "*None* present depressions on their apices." Ellis, a more recent work, also says (*vide* page 81, Diseases of Children): "The vesicles of varicella present no central depressions, as in small-pox."

Now, I feel confident I have frequently seen cases of undoubted chicken-pox where several of the vesicles have been umbilicated. This evening I was called for the first time to see a boy of six, who had been in bed since Sunday, suffering from supposed chicken-pox. The mother states there was no rash on Saturday, and he was full out the next day, the pimples appearing first on his shoulders, and then his head. The person who fetched me described the pimples as clear, like blisters caused by boiling water. The head is now thickly covered, a few (five or six) on the face; several on the shoulders and back had fallen off, leaving a red circular stain, surrounded by a still more distinctive inflammatory redness; there were two or three vesicles on the forehead and face that had a decided central depression, and a few more scattered here and there on the shoulders and back. The vesicles on the head were pustular, several in the stage of desiccation. There was no fever, and the boy did not appear at all ill. The margins of the pimples were somewhat hard, and I could imagine their being hastily described as shotty by one who did not recognise they wanted the hard globular feel of the small-pox vesicle, and that merely the margins of the pimples were hard.

If umbilication of the vesicle is a distinctive sign of small-pox, then the case I saw to-night was one of varioloid or mild small-pox, and I was wrong in calling it chicken-pox, which I did, forming my diagnosis from the following symptoms:—The slightness or almost absence of illness, out of all proportion to the eruption, the body in parts being thickly covered; the rapidity of the appearance of the rash, it being fully out in twenty-four hours; the number of the vesicles on the head, their sparseness on the face. Several of the vesicles had fallen off, although only the evening of the third day, whereas the scabs of small-pox do not fall off, even in a very mild case, until the ninth or tenth day, variola generally remaining in the pustular stage nine or ten days. There had been no period of incubation; for the boy was quite well, and had no sign of illness until the eruption appeared.

Yours truly,

Hammersmith, Jan. 29th, 1878. F. H. ALDERSON.

Mr. Millar.—We are obliged for the reference. It is scarcely worth while to revive the case instanced.

Brasted.—Something depends on the means of the particular patient. The charge is not, abstractly, at all excessive.

Magister should consult a surgeon.

FRACTURE OF THE FEMUR IN BREECH PRESENTATIONS.

To the Editor of THE LANCET.

SIR,—The following case presents features of interest sufficient, I think, to warrant its being placed upon record.

On Monday, Jan. 14th, I was called at 5 P.M. to attend a young and healthy primipara (no history of syphilis, hereditary or otherwise). She was in labour at full term, and had been so since the previous day. The pains were very strong and frequent, the membranes were protruding outside the vulva and unruptured, and the os uteri was fully dilated. I ruptured the membranes; but as no progress was made, and the case being one of breech presentation, and the mother getting very anxious to be soon out of her trouble, I tried to assist nature by hooking the forefinger of my right hand around the child's left thigh from without inwards, and proceeded to make gentle traction downwards, not with a view of converting a breech into a foot presentation, but mainly to assist the descent of the breech, when, to my horror, a sudden snap in the femoral region indicated a fracture of the femur. The mischief being done, I of course, naturally shrank from trying to "assist nature" by bringing down the other leg in a similar manner. However, labour did not progress. I, therefore, made a closer inspection of things, and then for the first time I noticed that the skin was peeling from the foot and leg, which were now protruding, and indicating, to my great joy, be it said, that the child was dead. I then proceeded to bring down the other leg in a similar manner to the first, but without fracturing the limb. The case was terminated in the usual manner of foot presentations.

This case presents the following feature of interest:—First, the possibility of fracturing the femur (in the centre) of a dead child with the mere traction of the forefinger. May it not be possible to do a similar thing with a living child? And should not the case prove the value of the lesson so often taught, and yet so frequently neglected—i. e., meddlesome midwifery is bad, and in a breech presentation let the breech come?

Yours obediently,

Kennington-park, Jan. 18th, 1878. ALBERT S. MORTON.

THE ALEXANDER MEMORIAL PRIZE.

IT may be well to remind medical officers of the army that the essays for the Alexander Memorial Prize of £50 and a Gold Medal of the value of £10 must be lodged with the President of the Fund Committee on or before the 31st December next. The subject of the essay is, "On the Influence of Drinking-water in Originating or Propagating Enteric Fever, Diarrhœa, and Cholera; to be illustrated as far as possible by instances which have come under the personal observation of the authors."

Mr. G. L. Thompson.—We have no knowledge of any respectable publication of the class named.

A REMARKABLE BIRTH.

To the Editor of THE LANCET.

SIR,—I was asked on the night of the 20th ult. to see an infant just born. The midwife, who is fairly efficient (of course she is; her mother was a midwife) had sent for me on discovering the peculiar state of the child. She stated that the labour had been short, the pains not very severe; the child was born while the mother was kneeling at the bottom of the bed, almost twenty minutes before I came. The infant was rolled up in a piece of flannel, on which was a large amount of blood, which had come from the cut end of the cord, which the midwife had not tied in her fright, and the child was much blanched, but still breathing occasionally. It died before I left the house. From an opening, about three inches long, in the right side of the abdomen protruded about three feet of small intestine, very much distended with meconium, which escaped from the mouth as I returned the bowel into the abdomen, but none came from the anus, and on examining the lower end of the protruded portion I found a very sharp knuckle, beyond which the intestine was quite contracted. The edges of the opening, which was between the external oblique muscle and the sheath of the rectus, were thin, and the peritoneum appeared to be continuous with the skin. (At a further examination some days later I found that the child had a remarkable dilatation of one of the ureters, forming a kind of second bladder.) I concluded that the abdominal wall must have been very thin at the point of rupture, and had given way during the last expulsive pains, the loaded and impervious state of the intestine being favourable to such an event. Whether the infant would have survived in spite of the obstruction in the canal, if it had not had the umbilical hæmorrhage, is difficult to determine. During the first month of the pregnancy the mother found a neighbour's child with his clothes on fire. She helped to remove the burnt clothing, and was much distressed at the child's condition; the worst burns were on the chest and abdomen, and soon proved fatal.

Yours truly,

Castle Cary, Jan. 12th, 1878. C. P. COOMBS, M.D. Lond.

COMMUNICATIONS not noticed in the current number shall receive attention in our issue of the ensuing week.

COMMUNICATIONS, LETTERS, &c., have been received from—Dr. Greenhow, London; Dr. G. Johnson, London; Dr. G. Hewitt, London; Dr. Dale, King's Lynn; Dr. Habershon, London; Mr. Dare, London; Mr. Goyder, Bradford; Dr. Paterson, Perth; Mr. Pepper, London; Mr. Cooke, Bankfoot; Mr. Odell, Hertford; Mr. H. C. Wordsworth, London; Mr. Masterman, Ixworth; Mr. Farrand, Nottingham; Mr. Teevan; Mr. Davies-Colley; Mr. Thompson, London; Mr. Whittle, Brighton; Mr. Mitchell, London; Mr. Wheeler, Chicago, U.S.A.; Mr. Napier, London; Mr. Harding, Cape Colony; Messrs. Barraud and Co., London; Mr. Paul, Liverpool; Dr. Draper, Boston, U.S.A.; Mr. Linde, Edinburgh; Dr. Campbell, New York; Mr. L. Tait, Birmingham; Mr. Stewart, Barnsley; Mr. Smith, Bristol; Mr. Gutteridge, Maldon; Dr. Cadell, Edinburgh; Mr. Godrich, Fulham; Dr. Barker, Surat; Mr. Millar, New Wandsworth; Dr. Maclagan, Dundee; Mr. Pearce, London; Dr. Cane, St. Albans; Mr. Wye, Birkenhead; Mr. Lamond, Jarrow-on-Tyne; Mr. Ashburner, Horsham; Mr. Elson, Whitwell; Mr. Cooper; Dr. Lawson, Exeter; Mr. Josephs; Dr. Irvine, Glasgow; Dr. Wyld; Dr. Wilson, Kilburn; Mr. Gore, Bath; Dr. Diamond; Dr. Glasier; Mr. Abel, Forest-gate; Dr. Smith, Kilburn; Mr. Field; Mr. Bott; Mr. Carpenter; Mr. Fry; Dr. Dean, Manchester; Dr. Watt; Mr. Page; Mr. Day; Dr. Eberle, Easingwold; Mr. Sadler; Dr. Price, Narberth; Dr. Tatham, Salford; Dr. Kiernander; Rev. S. Martin; Mr. Bryden; Mr. Watson; Dr. Freund; Mr. Thomas; Subscriber; The Director-General of the Army Medical Department; Post-partum; Constant Reader; W. B. Y.; M.R.C.S.E.; A. B. M.; A. B.; Medical; Locum Tenens; F.R.C.S.; Lex; M.R.C.S.; A Disgusted Doctor; G. P.; Magister; Cornwall; Delta; W. S. B.; &c. &c.

LETTERS, *each with enclosure*, are also acknowledged from—Mr. Grant, Birmingham; Messrs. Nicholls and Co., Altrincham; Dr. Nicholls, Rotherhithe; Mr. Jenkins, Stirling; Mr. Atkinson, Leeds; Messrs. Jolly and Sons, Norwich; Mrs. Shipman, Carlisle; Dr. Palk, Southampton; Mr. White; Mr. Sims; Mr. Turner; Dr. Brown, Chester; Dr. Snow; Mr. Gibson; Mr. Pike; Mr. Cameron, Lismore; Mr. Ford; Mr. Haynes, Bishop-Stortford; Mr. Buck; Mr. Rowland; Mr. Place; Fides; R. W. H.; Surgeon, Islington; Student; H. J. T.; Surgeon; M. B.; Yorkshire; G. T.; Wortham; A. 12; Medicus, Great Yarmouth; B. B. Y.; A. B. C., Church Stretton; G. R.; G., Manchester; Medicus, Blackburn; A. F. H.

Sunderland Daily Times, British Architect, Sunderland Daily Echo, Maidstone Journal, Sydenham Gazette, Borough of Marylebone Mercury, West Sussex Gazette, Students' Journal, Hornet, Tobacco Plant, Journal of Commerce, Glasgow Herald, Jarrow Guardian, &c., have been received.

METEOROLOGICAL READINGS.

(Taken daily at 8 a.m. by Steward's Instruments.)

THE LANCET OFFICE, FEB. 7TH, 1878.

Date.	Barometer reduced to Sea Level, and 32° F.	Direction of Wind.	Wet Bulb	Dry Bulb	Solar Radia in Vacuo	Max. Temp Shade	Min. Temp	Rain fall.	Remarks at 8.30 A.M.
Feb. 1	30·61	N.E.	32	35	..	42	32	..	Cloudy
,, 2	30·37	N.E.	38	40	..	44	33	..	Overcast
,, 3	30·42	N.E.	41	43	..	45	33	..	Overcast
,, 4	30·55	N.E.	41	42	..	43	40	..	Overcast
,, 5	30·63	E.	37	39	..	40	33	..	Overcast
,, 6	30·59	S.E.	34	36	..	40	33	..	Overcast
,, 7	30·62	N.	33	33	..	..	33	..	Overcast

Medical Diary for the ensuing Week.

Monday, Feb. 11.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M. each day, and at the same hour.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M. each day, and at the same hour.
ST. MARK'S HOSPITAL.—Operations, 9 A.M. and 2 P.M.
METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.
ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
LONDON HOSPITAL.—Operations, 1½ P.M.; on Wednesday, 2 P.M.; on Thursday, 1½ P.M.; and on Saturday, 2½ P.M.
ROYAL COLLEGE OF SURGEONS OF ENGLAND.—4 P.M. Professor Parker, "On the Morphology of the Batrachia."
MEDICAL SOCIETY OF LONDON.—8½ P.M. Dr. Kilburne King (Hull), "On a Case of Ligature of the Carotid and Subclavian Arteries for Aneurism of Arteria Innominata and Aorta."—Mr. Balmanno Squire, "On two Cases of Flat Vascular Nævus successfully treated by repeated Linear Scarifications."—Dr. Althaus, "On Diseases of the Anterior Cornua of the Spinal Cord."

Tuesday, Feb. 12.

GUY'S HOSPITAL.—Operations, 1½ P.M., and on Friday at the same hour.
WESTMINSTER HOSPITAL.—Operations, 2 P.M.
NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
WEST LONDON HOSPITAL.—Operations, 3 P.M.
ROYAL INSTITUTION.—3 P.M. Professor Garrod, "On the Protoplasmic Theory of Life, and its bearing on Physiology."
ROYAL MEDICAL AND CHIRURGICAL SOCIETY.—8½ P.M. Ballot.—8½ P.M. Dr. Poore: "Analysis of Seventy-five Cases of Writer's Cramp."—Dr. Broadbent, "On a Case of Amnesia."
ANTHROPOLOGICAL INSTITUTE OF GREAT BRITAIN AND IRELAND.—8 P.M.

Wednesday, Feb. 13.

MIDDLESEX HOSPITAL.—Operations, 1 P.M.
ST. MARY'S HOSPITAL.—Operations, 1½ P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M., and on Saturday at the same hour.
ST. THOMAS'S HOSPITAL.—Operations, 1½ P.M., and on Saturday at the same hour.
KING'S COLLEGE HOSPITAL.—Operations, 2 P.M., and on Saturday at 1 P.M.
GREAT NORTHERN HOSPITAL.—Operations, 2 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M., and on Saturday at the same hour.
SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2½ P.M.
ROYAL COLLEGE OF SURGEONS OF ENGLAND.—4 P.M. Professor Parker, "On the Morphology of the Batrachia."
HUNTERIAN SOCIETY.—7½ P.M. Annual Meeting for Election of Officers. 8 P.M. Annual Oration, by Mr. P. L. Burchell.

Thursday, Feb. 14.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.
ST. THOMAS'S HOSPITAL.—Ophthalmic Operations, 4 P.M.
CHARING-CROSS HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M., and on Friday at the same hour.
ROYAL INSTITUTION.—3 P.M. Professor Dewar, "On the Chemistry of the Organic World."

Friday, Feb. 15.

ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1½ P.M.
ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
ROYAL COLLEGE OF SURGEONS OF ENGLAND.—4 P.M. Professor Parker, "On the Morphology of the Batrachia."
ROYAL INSTITUTION.—3 P.M. Weekly Meeting.—9 P.M. Dr. P. L. Sclater: "Zoological Distribution and some of its Difficulties."

Saturday, Feb. 16.

ROYAL FREE HOSPITAL.—Operations, 2 P.M.
ROYAL INSTITUTION.—3 P.M. Mr. R. Bosworth Smith, "On Carthage and the Carthaginians."

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Mons. DE LOMINIE, 208, Rue Grenelle St. Germain, Paris.